

ORAL HISTORY INTERVIEWS

DONALD R. GLASER



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Statement of Donation

**STATEMENT OF DONATION
ORAL HISTORY INTERVIEWS
DONALD R. GLASER**

1. In accordance with the provisions of Chapter 21 of Title 44, United States Code, and subject to the terms, conditions, and restrictions set forth in this instrument, I, Donald R. Glaser, (hereinafter referred to as "the Donor"), of , do hereby give, donate, and convey to the Bureau of Reclamation and the National Archives and Records Administration (hereinafter referred to as "the National Archives"), acting for and on behalf of the United States of America, all of my rights and title to, and interest in the information and responses (hereinafter referred to as "the Donated Materials") provided during the interviews conducted on September 22, and October 12, 1993, February 6, 1998, March 20, 2009, September 3, 2010, December 16, 2011, and April 30, 2013, at Building 67 on the Denver Federal Center, and prepared for deposit with the National Archives and Records Administration in the following format: cassette tapes and transcripts. This donation includes, but is not limited to, all copyright interests I now possess in the Donated Materials.
2.
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4. The Archivist may dispose of Donated Materials at any time after title passes to the National Archives.

Date: 4/30/13Signed: 

Donald R. Glaser

INTERVIEWER: Brit Allan Storey

Having determined that the materials donated above by Donald R. Glaser are appropriate for preservation as evidence of the United States Government's organization, functions, policies, decisions, procedures, and transactions, and considering it to be in the public interest to accept these materials for deposit with the National Archives and Records Administration, I accept this gift on behalf of the United States of America, subject to the terms, conditions, and restrictions set forth in the above instrument.

Date: _____

Signed: _____
Archivist of the United States

Editorial Convention

A note on editorial conventions. In the text of these interviews, information in parentheses, (), is actually on the tape. Information in brackets, [], has been added to the tape either by the editor to clarify meaning or at the request of the interviewee in order to correct, enlarge, or clarify the interview as it was originally spoken. Words have sometimes been struck out by editor or interviewee in order to clarify meaning or eliminate repetition. In the case of strikeouts, that material has been printed at 50% density to aid in reading the interviews but assuring that the struckout material is readable.

The transcriber and editor also have removed some extraneous words such as false starts and repetitions without indicating their removal. The meaning of the interview has not been changed by this editing.

While we attempt to conform to most standard academic rules of usage (see *The Chicago Manual of Style*), we do not conform to those standards in this interview for individual's titles which then would only be capitalized in the text when they are specifically used as a title connected to a name, e.g., "Secretary of the Interior Gale Norton" as opposed to "Gale Norton, the secretary of the interior;" or "Commissioner John Keys" as opposed to "the commissioner, who was John Keys at the time." The convention in the Federal government is to capitalize titles always. Likewise formal titles of acts and offices are capitalized but abbreviated usages are not, e.g., Division of Planning as opposed to "planning;" the Reclamation Projects Authorization and Adjustment Act of 1992, as opposed to "the 1992 act."

The convention with acronyms is that if they are pronounced as a word then they are treated as if they are a word. If they are spelled out by the speaker then they have a hyphen between each letter. An example is the Agency for International Development's acronym: said as a word, it appears as AID but spelled out it appears as A-I-D; another example is the acronym for State Historic Preservation Officer: SHPO when said as a word, but S-H-P-O when spelled out.

Introduction

In 1988, Reclamation began to create a history program. While headquartered in Denver, the history program was developed as a bureau-wide program.

One component of Reclamation's history program is its oral history activity. The primary objectives of Reclamation's oral history activities are: preservation of historical data not normally available through Reclamation records (supplementing already available data on the whole range of Reclamation's history); making the preserved data available to researchers inside and outside Reclamation.

A note on the nature of oral histories is in order for readers and researchers who have not worked with oral histories in the past. We attempt to process Reclamation's oral histories so that speech patterns and verbiage are preserved. Speech and formal written text vary greatly in most individuals, and we do not attempt to turn Reclamation's oral histories into polished formal discourse. Rather, the objective during editing of interviews is to convey the information as it was spoken during the interview. However, editorial changes often are made to clarify or expand meaning, and those are shown in the text.

Questions, comments, and suggestions may be addressed to:

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For more information about Reclamation's history program see:
www.usbr.gov/history

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Oral History Interviews Donald R. Glaser

Storey: This is tape 1 of an interview by Brit Storey, with Deputy Commissioner Don Glaser of the Bureau of Reclamation, in his offices on the 14th floor in Building 67, at the Denver Federal Center, on September 22, 1993, at 8:30 in the morning.

Well, Mr. Glaser could you tell me where you were born and raised and your educational background and how you came to Reclamation.

Early Life

Glaser: I was born in Southern California in North Long Beach. And my family lived in Orange County at the time, out near what is now Anaheim or Garden Grove, out near Disneyland. And this was when Orange County was the country and was made up of truck farms and dairy farms, chicken farms. And I went to elementary school in Westminster, California and looked at myself as a country boy. And the first time I moved to a city was in 7th grade, and I moved to Great Falls, Montana, and it was the first metropolitan area I lived in, or what I viewed to be a city. And it is the place where I began to develop some of my values about the West and what the West meant to me.

I spent a lot of my time when I was in Great Falls, where I went through junior high and started high school at Great Falls High School, I spent a lot of my time enjoying the spectacle that is the state of Montana. One of the treasures of the nation I believe. And I spent a lot of time on the Sun River. And I'd spend a lot of my summer between what was then called the Diversion Dam to me, which I know today is the Sun River Diversion and Gibson Dam, having no idea who built them nor even caring, just knowing they provided me a haven for recreational opportunity as a kid, where you could fish and hunt and just generally explore nature. And in high school, I moved back to Southern California, to Santa Barbara High School, which was a great place to be. A high school kid and still took up very much outdoors-type activities, spent most of my summers and winters surfing and then enjoying the ocean and the natural spectacle that is Santa Barbara. And began college there in engineering at the University of California, Santa Barbara, and like a lot of kids out of high school lacked the maturity to go into a really large university forum.

And I quit after the first year, kind of unhappy about higher education in general, and went into the service and spent 4 years in the Air Force. This would have been 1966-70 which is of course, right in the heart of the Vietnam War era. And like most kids during that time, I spent my year in Vietnam and I was stationed at Tah Son Nhut Air Base, that was in the Air Force of course, and traveled to a lot of different places in the United States and in the world. In the Air Force, I seemed to have the fortune or misfortune of everywhere I would go, the unit would close down so I'd get to go somewhere else. And the wonder of it was I saw this wonderful country that we call the United States, and being stationed in George Air Force Base on the desert, actually I was stationed in Amarillo Air Force Base in Texas, and saw first-hand what the panhandle of Texas was really like. And one day they told me I was going to go to Denver from there and be stationed at Lowry Air Force Base. And so I went out to the edge of town and stood on the roof of my car and looked at Denver from Amarillo. So flat was the

area that you had the sense you could do that. And I spent 6 months in Denver at Lowry Air Force Base, never thinking that I would live here again, but really enjoying my experience here and along the Front Range. This was in 1966 when Denver was a different town than it is today also. And spent a lot of time in the inner city of Denver at a time when it was just beginning to evolve.

From there I went to George Air Force Base in the desert of California, what's called the High Desert of Victorville, and was on the Mojave River and enjoyed what the desert offered, but was only there 6 or 8 months and was sent to Minot, North Dakota, where I spent a fall and a winter at Minot Air Force Base. And from there spent time at MacDill at Tampa Bay, Florida, and understood what the gulf coast of Florida is about and fell in love with St. Pete, St. Petersburg, and the white sand and stopped along a Panama City at Tyndal Air Force Base along the way and spent a temporary tour there and then went overseas and spent a year in Saigon at Tah Son Nhut Air Base. And I was a proud American like everybody at that time and sang Barry Sadler's "Green Beret," and very . . . patriotic and therefore, unquestionably loyal to the policies and decisions of this country. And I went to Vietnam and we had housekeepers there, the war was hard with housekeepers of course, and the housekeepers wanted to know over time as we'd discuss the war and what we were doing there, they wanted to know why it is Americans chose to fight their war in South Vietnam, because they didn't view it as their war, but our war. And I was forced to begin to reflect on the values of our country and why we did things that we did as it related to foreign policy—and I was just young and impressionable and read a lot of things.

And from there I went to Japan and I spent a year and a half in Japan, and from there, spent temporary duty in Korea, as many people stationed in Japan did, and I had four tours I think in Korea, 30 days each, I guess I spent maybe a half year in Korea out of the year and a half I was in Japan. And again to see how the eastern culture viewed Americans and American policies. And so when I came back from spending 2-1/2 years in the [Far] East and being exposed to eastern cultures, I was beginning to become somewhat questioning of our policies as a nation and as some of the values we hold in our society. In the West we tend to appreciate this rugged individualism. And we see that as being the character that built the West that we know today, and we almost have a romance or a love affair with this concept of the rugged individualist, the John Wayne-type image of the American. But as I spent 2-1/2 years in the Orient, what I saw is a society that puts the good of the society as a whole, ahead of the rights of the individuals, or the good of the individual, and they do that voluntarily, its country first, individual second. And when I came back home what I saw is an American society that puts individual first and society second, and it drives a lot of our policies and I began to understand, that even in myself, how . . . self interest drove my national interest. And I thought all this was interesting and I decided after the service that I was going to go back to Montana, a place of choice.

And I moved to Billings, Montana, and went to work in a parts warehouse, first I did farm labor . . . put up hay one summer just to make money so I could buy a vehicle and kind of get by. Then I went into . . . an auto parts warehouse, worked there a year and decided this is not really taking me anywhere. My brother and I decided to open a business. So I quit my job and went back to school so I could get my G-I benefits, learn some things that would be useful in a business, and have the latitude to conduct business activities during the day and work my

school schedule around that. And after I was back in school, I found I enjoyed school more than I did trying to run a business. And working with my brother, as much as I love my brother, was not one of those ventures in life that was real successful. And I could tell that we could either have a successful business together and an unsuccessful sibling relationship, or we could go our way and stay close as brothers, so I chose the later and I quit the business. My brother still runs today in fact, it's a construction, electronic construction business, contracting business, he's been very successful. But in Montana I chose to live in a rural community, I lived in a farm community. We have about 18,000 acres outside of Billings, its in a . . . family business and I lived on the farm and worked in town, but I lived in the farm community. And interestingly enough, the farm community there, where everybody goes to school and where we socialized, was Huntley Project.¹ In fact, the towns there are called Huntley, the town of Huntley and the town of Warden, both of which are on the project.

Working for the IRS

I never gave much thought to why it was called Huntley Project or "the project" other than that's just what it was called and even though I lived there. And I went back to Eastern Montana College and pursued an education in first, mathematics, and then economics. And as I began to stack up these credits and get near graduation I needed to get something that had a higher utility and marketability. Mathematics and economics were not your big-demand career fields unless you wanted to be an actuary or a teacher, they didn't have much utility. So I ended up getting a degree in business administration and went to work for the Internal Revenue Service [IRS]. I went to work actually at I-R-S as a co-op when I was still in school. And I spent 3 years I think, maybe 2-1/2 years, working for I-R-S, auditing tax returns. I was a tax auditor, and spent a lot of time with individual taxpayers, assessing tax, going over their returns, and its amazing what kind of a relationship that creates between you and the taxpayer. They're very frank about how they feel about the government and what the government does with their money and about taxation and about civil service. I never intended to be a civil servant at that time. I was getting different job offers from Burrows, who was a big computer firm at that time, or Author Anderson who was one of the big eight accounting firms, and I considered them, but I stayed with I-R-S for what reason I'm not certain. After about 2 or 3 years with I-R-S, I decided, based on this feedback from these individuals about public service, I made a conscious decision that I was going to commit myself to public service . . . as an honorable life endeavor, irrespective of where it took me as a matter of career and recognizing the fact that I would not make as much money as if I went to work for Burrows or Author Anderson or some other large firm that was courting me at the time.

And I did that in direct relation to these comments that came from these individual taxpayers about their feeling that they were not represented and that individuals did not take their interests at heart as they conducted their day-to-day activities. And I didn't know if that was true, but I knew its how they felt. And I thought maybe that I could go in public service and at least feel good every day that at least one had met them and understood their concerns and to try to carry that through my career. And after about 2 or 3 years of auditing returns, it was about all I could stomach. I mean it was hard work to assess tax to individual people who

¹ The Huntley Project is located in south-central Montana and diverts water from the Yellowstone River to irrigate approximately 30,000 acres. For more information, see Timothy A. Dick, "Huntley Project," Denver, Bureau of Reclamation, 1996, www.usbr.gov/history/projhist.html.

had real stories in life that were tragic. And you tended to audit people just the way returns are selected, that have had traumatic experiences in their lives. You audited medical returns, medical issues on returns because they were inordinately large. Well they were inordinately large because somebody had a life event. You audited moves because they were large deductions on the return, well moves are often traumatic events in peoples lives. So you found yourself always inspecting what was the most important thing in a persons life at a given time and in a very personal fashion. And I couldn't take it after very long and so I decided to go to work for somebody else. And one of my former roommates at I-R-S went to work for this agency in town, he went to work at a place called Yellowtail or Fort Smith at Yellowtail Dam,² and he was the administrative officer there and he called me up one day because I was auditing a bunch of their individuals on housing allowances, and he says "You know what, they're looking for a new person at the Bureau of Reclamation, and they're looking for somebody really special, you ought to call about this job," . . .

Storey: Where was this I-R-S job?

Glaser: It was in Billings, I'm sorry, it was in Billings, Montana.

Storey: Go ahead.

Never Heard of the Bureau of Reclamation

Glaser: . . . and of course Fort Smith and Yellowtail are on the Big Horn River just outside of Billings, about 90 miles outside of Billings, and there was a Regional Office in Billings, it was in fact, the biggest federal employer in the city, biggest federal employer in the state. And I'd never heard of the Bureau of Reclamation, even though I lived on Huntley Project, even though I summered on the Sun River, both of which are Reclamation facilities. I'd never heard of it. And so, when he said "The Bureau of Reclamation's looking for somebody." I said, "Well, gee I don't know." He said, "Well, just call them up anyway." So I interviewed with this assistant regional director for the Bureau of Reclamation's Upper Missouri Region, and he subsequently offered me a job, and I went to work for Reclamation, having no idea what they were as an institution and with not real consideration for what career was going to be afforded me there.

Storey: Who was the assistant R-D?

Glaser: The assistant regional director at the time was named Ron Kruger. And bless their hearts as all bureaucracies, I was hired as the special assistant regional director, no I was the special assistant to the assistant regional director for administration, that was my title, special. I looked that up the other day when they sent out my draft press release for announcing me as the appointed deputy commissioner, they noted that my first job with Reclamation was the special assistant to the assistant regional director for administration, and it took up a line and half on the press release, so I knew that there was no value in having it in there. I began in a nondescript job, sort of a rotational job that they were going to match my skills to the needs of the institution. And after rotating around the Regional Office for 8 months or so in various capacities, they wanted me to go into programming or budgeting and I didn't want to do that, it

² Yellowtail Dam is on the Bighorn River in south central Montana; part of the Pick-Sloan Missouri Basin Program providing irrigation, flood control and hydroelectric benefits.

was a field that didn't enamor me, so I chose to go into personnel management. In that office it happened to be an area of . . . it was dynamic, it was influential, and there was going to be a lot of opportunity, a lot of people in their 50s in the office and it just looked like a good place to work at the time. And that was probably around 1975 or so, and I found myself within 3 years, as a branch chief.

And at that time I thought that if I was ever a grade 12, they were probably paying me more than I was worth. And a few years later I found myself as a branch chief at about the 13 level, and within another year and a half, I was the division chief and the personnel officer for the Region. And I thought that I'd probably achieve what I was going to achieve in my career. I didn't want to go to Washington and be the personnel officer for the Bureau, and I questioned whether or not there was any place else in my career to go. This is in like 1978 or '79, maybe 1979, just very early in my career, very young. And . . . one day I woke up and the regional director was twisting my arm to come into the front office as the assistant regional director for administration. I was trying to do away the job, because I thought it was just another bureaucratic layer. And his point to me at that time was, "Look, I'm going to fill the job, you can either work for whoever I pick," and he told me who he was going to pick if I wouldn't apply, "or you can go up and do it," those were sort of my choices. So I agreed to go up and do it, it was a lateral reassignment for me and . . . that was in the early '80s, and of course that was an interesting time for Reclamation, the early '80s.

"The Most Interesting of All Times of Reclamation"

I've been fortunate to live through what I think is the most interesting of all times of Reclamation, to live in Reclamation during that period of time, which I think is from '75 to '90. I think the future will even get more interesting, but I'll come back to that maybe, talk about how all of this plays out in Reclamation. I spent 7 or 8 years in the front office, the Regional Director's Office in Billings, and I served a lot of different capacities. And over that 7 or 8 years we went from the Upper Missouri Region to the Missouri Basin Region to the Great Plains Region. And we started out with portions or all of four states in the Upper Missouri Basin, half of Montana, half of Wyoming, North and South Dakota. And when the decision was made in '85 to close the Lower Missouri Region, we assumed all responsibility for their programmatic area, which added another large part of Wyoming. So we ended up with Wyoming east of the Continental Divide, Colorado east of the Continental Divide, Kansas, Nebraska, added to North and South Dakota and eastern Montana. And we became a relatively large region. And then a few years later in '88 when it was decided to close the Amarillo Office, we picked up the lion's share of the geography for that Region and a minimal part of the program, but we picked up all of Texas, Oklahoma, and added that to our geographic domain.

And the interesting thing was, every time that I would kind of get bored with where we were at programmatically, I mean I was in the front office for 3 or 4 years and thought I knew everything there was to know about the Upper Missouri Region. Then they would add this new geographic area, and so you'd have all these new issues that you got to deal with. It was just like moving to a new region, and then when I thought I understood as much as there was to know about the [Lower] Missouri Basin Region, then they added all of Oklahoma and Texas. And getting Texas was like getting a new world, because nothing that applied elsewhere in the

Region, applied to Texas. They had their own form of water interest, their own form of water politics, it was just a world in itself. And a lot of what they say about Texas is true, the specialness of the place because it is unique within the West, politically unique if nothing else. I spent, in 1989 I was asked to go back and fill-in in Washington as the assistant commissioner for program and budget, whatever it was, the assistant commissioner for administration, filling in for Bill Klostermeyer³ when he retired.

And it was at a time that Reclamation was going through a transition of commissioners. The Bush administration had just come in and, they were having a transition of secretaries and commissioners, Dale Duvall⁴ was there as the commissioner at the time, but he was apparently on his way out as commissioner, and there would be appointment of a new commissioner. So I was there at the end of Dale Duvall's tenure as commissioner, the time that Joe Hall acted as commissioner back there, and then Dennis Underwood⁵ when he came in as the new commissioner. It was an interesting dynamic to watch the transition. And there wasn't very much staff in Washington. I went to Washington right after the decentralization of all the staff from Washington, and what was left there was kind of a residual workforce. It was just sort of odds and ends that didn't go to Denver. And back in 1989, Denver was going to be the universal center of Reclamation, and Washington was just sort of a place. And folks back there weren't feeling real good about that.

So it was kind of a down time for the office but I think we got above that. We found ourselves a mission and a responsibility and got a new commissioner in Dennis Underwood who was enthusiastic and certainly hard-working, and worked very, very long hours. And I found myself working very close to the commissioner, worked very closely with him—those same long hours we'd go to work at 6:30 in the morning and work until 7 or 7:30 at night every day, and he'd work the same hours on the weekend, but I refused, because I wanted my private life also. But it was a very, very interesting time, for me personally, very much a growth experience for me. I learned a lot about myself. I learned a lot about my own values, and I learned a lot the needs of an institution and the individuals that make up that organization. That's where I truly began to understand that the Bureau of Reclamation was the composite of the workforce not something else. The Bureau of Reclamation was the 7,400 people that worked for it, and the associated history behind it. I was there for several years in the Washington offices, probably Dennis's closest associate, career associate anyway, and served as his, what he called his chief of staff back there. And found a balance between my

³ William Klostermeyer was Reclamation's assistant commissioner for administration from 1981 to 1989; the title was changed to assistant commissioner-administration in 1989. Mr. Klostermeyer also participated in Reclamation's oral history program. See, William C. Klostermeyer, *Oral History Interview*, Transcript of tape-recorded Bureau of Reclamation Oral History Interview conducted by Brit Allan Storey, senior historian, Bureau of Reclamation, and Donald B. Seney, Sacramento State University, Sacramento, edited by Brit Allan Storey, 2006, www.usbr.gov/history/oralhist.html.

⁴ C. Dale Duvall was commissioner of the Bureau of Reclamation from 1985 to 1989, and participated in Reclamation's oral history program. See C. Dale Duvall, *Oral History Interview*, Transcript of tape-recorded Bureau of Reclamation Oral History Interview conducted by Brit Allan Storey, senior historian, Bureau of Reclamation, edited by Brit Allan Storey, www.usbr.gov/history/oralhist.html.

⁵ Dennis B. Underwood was commissioner of the Bureau of Reclamation from 1989 to 1993 and participated in Reclamation's oral history program. See Dennis B. Underwood, *Oral History Interview*, Transcript of tape-recorded Bureau of Reclamation Oral History Interview conducted by Brit Allan Storey, senior historian, Bureau of Reclamation, from 1995 to 1998, in Los Angeles and Ontario, California, Edited by Brit Allan Storey, www.usbr.gov/history/oralhist.html.

relationship with Joe Hall as my boss and the deputy commissioner in Denver, and my close proximity to the commissioner. I sat in the adjoining office. So there was a period of time where, well in fact the whole [time] that I was there, Joe Hall was my boss and he was in Denver and he worked for Dennis Underwood, the commissioner, and Dennis Underwood and I had adjoining offices, and it created a very awkward situation, in that it would've been very easy for me to usurp Joe's authority. And I tried very hard not to have that happen, because I respected Joe as an individual and I respected the institutional hierarchy. And Joe and I worked out a very good relationship, and I was very pleased with the time I worked for Joe and sat next to Dennis, that worked alright. Dennis decided to set-up the principal deputy and some consideration was given to put me in that, and I've counseled strongly against his doing that. All appearances to the agency would've been that I did Joe in, no matter what was said, and so I volunteered to just step aside and go do something different so that he could select somebody fresh and new and the issue wouldn't be about me and Joe, it would be about needing a principal deputy.

Watching the Transition in Administrations

And I was asked to come out to Denver and help Joe bring about an institutional change in this office in Denver, that was in 1992. And . . . with the change of administration, from the Bush administration to the Clinton administration, I was asked by Secretary [Manuel] Lujan to come back to Washington and serve as acting assistant secretary during the transition until they could appoint somebody . . . was not very excited about doing that. I'd just moved my family out here, I'd spend a lot of time away from my family when I was acting in Washington for 9 months, when I'd just moved out to Denver and they didn't join me for another 4 months and other field assignment I'd had, like when I was the project manager at Bismarck for 5 months. And I just didn't like the time away from my family. So I wasn't very inclined to do that, and after several appeals by assistant secretary [John M.] Sayer in particular, I agreed to go do that for a period of time and then was asked to stay on by Secretary [Bruce] Babbitt and his chief of staff, Tom Collier. And it was also a very good experience for in my career having watched a transition in administrations, not just from one secretary to the next, but from one party to the next, where you have a full changeover in noncareer staff and Schedule C Appointees and the change in philosophy. It was an opportunity to be near Secretary Babbitt and contrast his style to Secretary Lujan, who I'd also had an opportunity to be associated with quite a lot. It was interesting to watch the new administration put together a management team and contrast that to the previous management team. It was an opportunity to get to know Assistant Secretary Betsy Rieke,⁶ who would ultimately be confirmed to take the position I was acting in and know her as an individual and as a public servant. And it was also a time to have some exposure to the commissioner-designate, Dan Beard,⁷ and to visit with him as an individual and a person who is contemplating taking

⁶ Elizabeth Anne Rieke was the first woman appointed as assistant secretary for water and science and served from 1993 to 1996. Ms. Rieke also participated in Reclamation's oral history program. See, Elizabeth (Betsy) Rieke, *Oral History Interview*, Transcript of tape-recorded Bureau of Reclamation Oral History Interview conducted by Donald B. Seney, edited by Donald B. Seney and further edited and desktop published by Brit Allan Storey, senior historian, Bureau of Reclamation, 2013, www.usbr.gov/history/oralhist.html.

⁷ Daniel P. Beard was commissioner of the Bureau of Reclamation from 1993 to 1995, and participated in Reclamation's oral history program. See Daniel P. Beard, *Oral History Interview*, Transcript of tape-recorded Bureau of Reclamation Oral History Interview conducted by Brit Allan Storey, senior historian, Bureau of Reclamation, from 1993 to 1995, in Washington, D.C., edited by Brit Allan Storey, www.usbr.gov/history/oralhist.html.

over the Reclamation program. And after returning to Denver and working for Joe for several more months, Joe Hall decided to retire in July of this year, and I was asked to succeed him in trying to lead the Denver Office into a different relationship with Reclamation, a Reclamation that has a different place in western water than we've had historically. And that's where we kind of find ourselves today, its been a really interesting a career. I've been blessed in the types of experiences that I've been afforded. Not very many people in Reclamation have been allowed to do the tremendous number of diverse things that I've been able to do, and have had the confidence placed in them by so many different people in leadership positions and often . . .

END OF SIDE 1, TAPE 1. SEPTEMBER 23, 1993

BEGINNING OF SIDE 2, TAPE 1. SEPTEMBER 23, 1993

A Taxpayer Advocate

Glaser: . . . I often wondered whether that trust or confidence was well placed, but I never once . . . underestimated the significance of it and the implications to me as a public servant. Because I go clear back to my time at I-R-S, when the basic values that I hold as a public servant were cast. And I test all the actions that I've taken and all of those influential positions. I test those against those basic principles that I developed early on and that was to serve the public interest. And to try to understand the public interest and then try to convey that to any sphere of influence that I might have. And so since day 1, I've been kind of an anomaly in Reclamation. I've been very outspoken, and I've been what I would call. I've always held myself to be a taxpayer advocate, and I pressed Reclamation very hard to make sure that the special interest that we served, the customers that we served, as we carried out our responsibilities under these separate laws and contracts, that we were doing that in the interest of the public as a whole. And that was something that was easy for us to forget sometimes, that there was a larger public interest that we served, because we had such a long and glorious relationship with the narrower interests.

I carry a cup around with me that I think is important. It has a quote from Ben Franklin on it, and it says "If a principle is good for anything its worth living up to," and I keep that and I turn it towards me all the time, and its in every meeting that I conduct and its in front of me yet as I talk. Because I want to be forced to reflect on the actions I'm taking and contrast them against them the public principles I've stated to assure myself that my action's consistent with my word, because to not be, would make me untruthful to what I think I stand for. So that's sort of how I view myself as an individual and as a public servant. I think public service is absolutely high-calling. And for whatever reason I get offered incredible jobs, jobs that I think that should go to people that are more worthy of them. But I stay and do this, and I stay and do this because I think this is important. And I wouldn't pick another time to work for Reclamation, although these are the hardest times, these are the hardest times emotionally, and the most uncertain times institutionally, but I wouldn't pick a different time to serve, because this is the greatest opportunity to influence. And people reflect back with fondness on the hay days of Reclamation, the great days of Reclamation, and they equate those to when we built the big structures, the monuments to society.

And I don't view that as the great days. I think these are the great days, because these are the days that we are going to ultimately determine how these facilities that we built on behalf

of society are ultimately used for the public good. And I think they're going to be challenging and rewarding times. And I hope we catch the spirit as an institution and look forward with an excitement to what it is that we're going to be able to do. It's been hard for us to get to where we're at today I think. And I came to work for Reclamation in the mid '70s. And if you look back on that time, that was a time when the environmental laws that we deal with today were relatively new. NEPA [National Environmental Protection Act] had just passed, Clean Water Act, the Migratory Bird Act, these were all relatively new laws. And in Reclamation at the time, I can remember folks telling me as I was trying to understand what this agency is all about—which was not very easy I must admit. In fact I can recall my first substantive meeting that I went to and it was a meeting that was called "skull practice," skull practice, and there was this tradition at the time where the regional directors and assistant commissioners all went off to meet with the commissioner, I believe in February, but in the winter, to talk about the program. They had this winter meeting and then they had the summer program conference, where they would talk about the program, which meant the budget and the activities that were formulated in the budget.

And we were getting the regional director at the time who was Bob McPhail,⁸ ready to go off to skull session. And I'd only been with Reclamation relatively few months, and I was afforded an opportunity to sit in this what I thought was a very elite group, these division chiefs and project managers for the Region, because I was on these rotational assignment. And I sat at the other end of the table from the regional director, Bob McPhail, who was a very quiet, thoughtful person. And I watched him through this whole meeting as he was assimilating all this data from the individuals, getting him ready to go off to this meeting with the commissioner. And this was all really fascinating to me because these folks were talking about things like programs and budgets, and program accomplishment. And I was particularly taken by this term program accomplishment, because I'd just come from I-R-S and I'd spent a couple years assessing tax and having people tell me about what they don't get for the money that's spent. And I was sitting through all this meeting, and they were talking about program accomplishments, which seemed to be a big deal, construction had a 94 percent accomplishment rate, and planning had a 97 percent accomplishment rate, and O&M was always lagging behind, it had a 90 percent rate, and I thought, well, this is interesting because the public doesn't think that we measure achievement.

And so I listened with interest and about 4 hours into this meeting, I finally figured out what accomplishment was. In Reclamation they equated expenditure to accomplishment, and the 94 percent accomplishment meant we spent 94 percent of the money that was allocated to us in the program. And I thought this was novel. And the meeting was coming to an end and bless his heart, Bob McPhail is somewhat unpredictable, he looked at me at the other end of the table and he goes "Well Mr. Glaser," he says, "What do you think of our process here?" And I mean, it was presumptuous for me to say anything because these were the elite in the institution in which I worked. And I said, "Well, I'd only make one observation." I said, "I'm intrigued by this idea of program accomplishment. I came from I-R-S, folks complained that we aren't interested in what it is we achieve with their money, and so when you start talking about that I was particularly attentive to that." And I said, "I figured out that when you talk about accomplishment you equate that to expenditure." I said, "But the only question I have, is where in the process do we measure what we got for what we spent. What is it we actually

⁸ Robert L. McPhail was regional director of the Upper Missouri Region from 1973 to 1978.

achieved for what it is we spent?" And I commenced to get a lecture by our budget officer at the time, who explained to me in time I would understand that, well, I waited a long time and still did not understand that, because today, we still struggle with the issue.

We understand today that expenditure and accomplishment are not the same thing, not only we in Reclamation but we in the government as a whole—that's a lot of what the N-P-R is all about, the National Performance Review, initially announced by Vice President [Al] Gore here with the president just last month, that we need to have different types of performance measures. And Reclamation recognized that a half dozen years ago and acknowledged it, but has not figured out how to do it since. So interestingly, philosophy or theory is a whole lot easier to come up with than practice and I think we found that within Reclamation. I digressed a lot, I'll go back to 1975 and these new environmental laws.

Social Values in Reclamation

I came into an institution that was explaining [to] me a lot about social values because we talked a lot about social values even at that time, and they said, "Don, what you need to understand, is this environmental jazz, its sort of like a big pendulum. Public value is like"—public opinion is what it was called at the time not public value. The term at that time I think was public opinion—"public opinion is like a big pendulum and it swings back and forth and now we've swung way to left"—I don't know how they figured left from right—"but it swung way to the left, and we were responding to these environmentalists extremists." That's how we viewed these folks like the Audubon Society and Sierra Club in the mid '70s, as environmental extremists. And these laws were in response to these environmental extremists. And with the next big drought or the next big flood . . . public opinion would come back to a more balanced place. And that's how we believed in 1975. And as I reflect back to on times, I would say those environmental extreme values of '75 are commonly understood to be mainstream values of today, as commonly accepted mainstream values, not only in society as a whole but within Reclamation. The things that we thought were extreme in '75, are commonly held today.

I remember in 1978 or so, one of our projects we had, we had all the lovely projects. You have to remember that we had an election in '76 and Jimmy Carter was elected as President of the United States. And he came in with a bunch of young and dynamic people, we thought they were extreme at the time, and one of the things they conceived was this "hit list" of projects.⁹ And in our Region at the time we were going great guns boy, we had the Oahe Project and the Garrison Project.¹⁰ We also had the biggest transmission program in all of Reclamation, in this little dinky geographic area called the Upper Missouri Region. We had

⁹ Jimmy Carter served as President of the United States from 1977 until 1981. Within a few weeks of the beginning of the administration, an internal discussion document accidentally fell into the hands of a reporter. The document proposed cancellation of a number of water projects considered environmentally or economically unsound. This proposal came to be known as Jimmy Carter's "hit list." This happened while Commissioner Daniel P. Beard worked in the Carter Administration, and he discussed his perspective on the issue in his Reclamation oral history interviews and in "The Passage of the Central Valley Project Improvement Act, 1991-1992: The Role of George Miller," an Oral History interview by Malca Chall, 1996 for the Regional Oral History Office, Bancroft Library, University of California.

¹⁰ The authors of Carter's "hit list" highlighted economic discrepancies on both the Oahe Project in South Dakota, noting that project beneficiaries were only required to pay \$176 per acre compared to a \$2,247 commitment by the federal government. Similar revelations occurred on the Garrison Diversion Unit in North Dakota where project farmers were only obligated to repay \$77 per acre on a federal investment of \$1,992.

1,100 people. We had a big budget. And following the Energy Act [Department of Energy Organization Act] that set up WAPA, Western Area Power Administration, which took almost 400 of our people and our regional director and much of our regional leadership who came down to be the administrator for Western and much of their infrastructure. And after the demise of the Oahe Project, which was on the "hit list," which went from a principal project under construction, one of the premier projects in Reclamation, well under construction, to nonexistent termination in just a few years. One of the few that they really terminated, from construction to dead stop. And with the Garrison Project running into all of its problems, our regional employment went down to just barely over 300. And they were not exciting times; they were anxious times.

Institutional Values Challenged

But through all of that, a lot of our institutional values were explored. In particular in North Dakota I remember we had a court injunction against us from a lawsuit that had been filed by Audubon on the Garrison Project, and we were enjoined from all construction activity until we did certain things. And I remember that we were trying to pump water out of a little lake so that we could operate a prototype fish screen and this little pond was where we were running the water into. And we decided that the easiest thing for us to do would be to construct an outlet channel, so that we could water the water out of this little lake called Lake In-Between, and took water from Lake Brecken-Holmes into Lake Williams. Now a lake in North Dakota, you have to get a mental picture of what this is when we say Brecken-Holmes and Lake Williams, these in anywhere else, would be a pond at best. Some people would call them a slough. . . . Lake Williams is a very saline body of water, very small, very much driven by the hydraulic cycle of North Dakota, but these are just very small bodies of water. One of the things we were enjoined against building was one of the permanent facilities on the project, which was the outlet works for Lake In-Between, or Lake Brecken-Holmes into Lake Williams.

Well, our O&M folks when they went out there to try to pump water out of Lake In-Between into Lake Williams. . . . they didn't understand this injunction and they didn't understand the values of wetlands and they didn't understand that this saline body of water called Lake Williams had incredibly high values to least terns and piping plovers, which are migratory birds that were probably threatened, maybe their endangered now, listed as endangered species. We didn't understand those issues, not the field staffs. So they just went out there and said "Well, gees, if we have to cut this channel to get this water out of here we might as well cut it to the design standard for the outlet works and save the government money." And so they did that. And to further reflect on the value at the time, they had to get rid of this material that they were extracting from this channel, the dirt that they were taking out with their front-end loaders. And their values, they all came from North Dakota, they were all farm kids, their value was well, the best place to waste this material, that's what you call it when you go dump it someplace. The best place to waste this material was in these marshes that didn't serve any purpose, then we'd be able to come back and reseed them, and they would have some redeeming value, then you could graze them with cattle. So not only did we build this outlet channel, but we were required by court injunction, signed by Secretary [Cecil D.] Andrus¹¹ at the time, agreed to by Secretary Andrus, not only did we build it, but the material we took out

¹¹ Cecil D. Andrus was secretary of the interior under President Jimmy Carter from 1977 to 1981.

we wasted in the wetlands, which was a predominant issue over the Garrison Project at the time. Our folks just could not understand the flack that ensued.

Today, we're probably viewed as one of the premier agencies in North Dakota in prairie pothole protection.¹² And we know more about the construction of prairie potholes than any public institution. In a period of a short 10 years, an office like Bismarck, which was the bastion of conservative irrigation thinking, and was closely tied to the governor's office and irrigation district, has made this evolution to an office that not only understands, but cherishes and values the intrinsic qualities of wetlands, and has become a protector of the prairie pothole region. How can a person not be excited about being at a place and an institution that's able to make that kind of a transition? Right or wrong, you know there are some folks that still believe that the only good wetland is a drained wetland. There's probably even a few in Reclamation that believe that, but generally not as an institution. We embrace the concept of no-net loss and we want to actively engage in the recovery of wetlands in this country. When we debated, even as late as the mid '80s, when they were having the Garrison Commission, when Reclamation and [U.S. Department of the] Interior debated the merits of construction of a scaled-down Garrison Project in front of the commission . . . there was a debate about the values of a wetland and we questioned to a great extent whether or not wetlands held these broad values of flood control, groundwater recharge, water quality, in addition to the habitat values of the wetland. We were not willing to accept that they served these other purposes; that was in the mid '80s. By the late '80s not only did we accept that, but we advocated in public forums. So we were at this time of tremendous change.

Some areas were ahead of others, and North Dakota was ahead of a lot of places because the fight was over Garrison and the delegation and the governor just would not give up the quest to build Garrison Project; haven't to this day. So we were forced to inspect these public issues ahead of a lot of other places in Reclamation. But where we find ourselves today is in every corner of Reclamation's jurisdictional responsibilities, we have a prairie pothole issue. In California it's the anadromous salmon or the delta smelt on the San Joaquin or Sacramento River Bay-Delta areas. In Oregon it's the anadromous fish or the endangered fishes on the Klamath Project. In Oregon and Washington it's certainly the Columbia River salmon which is going to be an issue of national consequence. In Montana, it may be the pallet sturgeon on the Yellowstone, and in Nebraska and Wyoming it's going to be the migratory birds on the Central Platte. And just the intrinsic value and the critical link that the Central Platte plays for 10 million birds that migrate each year on the Central Flyway. So each area of this nation that we have jurisdiction for, is beginning to have it's own public issue that needs resolution.

Certainly on the Colorado River, the last 10 years of sorting out Glen Canyon [power] generation and its affect on the Grand Canyon, has been a public interspection unprecedented in western water issues. And the affect of the Colorado squawfish on the construction of the

¹² Prairie pothole region of the northern Great Plains is made up of numerous shallow wetlands known as potholes that are highly important migratory bird habitats. Many of these important and highly productive communities have been altered or destroyed due to increased agriculture and commercial development. As a result only 40 to 50 percent of the region's original prairie pothole wetlands remain today. See United States Environmental Protection Agency, "Prairie Potholes," water.epa.gov/type/wetlands/potholes.cfm, (Accessed July 2014).

Animas-La Plata Project and the Navajo Indian Irrigation Project,¹³ putting one set of national values against the other. Nobody questions anymore, and this is interesting in itself, nobody questions anymore the Native American right to have their water supply returned to them that was promised to them as part of their treaty entitlements and is recognized in the Winters Doctrine.¹⁴ Ten years ago, we would not acknowledge that as an institution, period, the end. We found ourselves to be adversarial with the Indian communities and the B-I-A (Bureau of Indian Affairs) and often the Solicitors Office in trying to protect that interest. Today, we clearly recognize that and are trying to support projects like Animas-La Plata and the Navajo Indian Irrigation Project to meet these Native American or Indian Nation needs. But ironically, we also now find ourselves in trying to satisfy one public value running up against endangered species issues, that bar our satisfying this Indian trust obligation.

"Traditional Coalitions are Falling Apart"

And so these traditional coalitions are falling apart, and I find that to be incredibly intriguing. In the old days it was really easy, there was water developers and all these other water interests that kind of hung around on the other side, we put environmentalists in this huge category. If it was a recreational fisherman who didn't like something Reclamation was doing to develop water, that is we dried up a stream, and therefore, ruined the fishery, we lumped those in with the environmentalists. And so we had this big category of people that were environmentalists, they were the aginners, and we had the water users and the power users who were on our side. We all lined up, and the rules were understood and the game was played. But what we're finding today, is these historic coalitions are all falling apart because we will see two sport fisheries interests on opposite sides of an issue. And we find ourselves in the middle, and we go, "How can this possibly be?" Because no matter what we do, we're going to be wrong in somebody's eyes, not only, we're just going to be wrong in everybody's eyes. We had a specific and perfect example of that. There was an application for a lease of power privilege by a local government on Tiber Reservoir, in Montana.¹⁵ And we had also a private interest that wanted to get a lease of power privilege, and they were competing for the right to license this plant. And one of them proposed to put an outlet works, that was a high outlet works that took water high out of the reservoir, and therefore, the water would be warmer. The other one proposed to have a lower outlet works, just as a civil design, there wasn't anything strategic about it, just as a civil design, and it would release colder water. And depending on

¹³ The Animas-La Plata Project was originally designed to store water on the Animas River along the Colorado-New Mexico border, and divert it to farms in the La Plata River basin. In 1980 the project was redirected to serve the water needs on the Ute Indian reservations in southern Colorado. For more information, see Jedidiah S. Rogers, "Animas-La Plata Project," Denver: Bureau of Reclamation, 2013; the Navajo Indian Irrigation Project provides irrigation water from Navajo Reservoir for the Navajo Indian Reservation in northwestern New Mexico. For more information, see Leah Glaser, "Navajo Indian Irrigation Project," Denver: Bureau of Reclamation, 1998, www.usbr.gov/history/projhist.html.

¹⁴ "The federal reserved water rights doctrine was established by the U.S. Supreme Court in 1908 in *Winters v. United States*. In this case, the U.S. Supreme Court found that an Indian reservation (in the case, the Fort Belknap Indian Reservation) may reserve water for future use in an amount necessary to fulfill the purpose of the reservation, with a priority dating from the treaty that established the reservation. This doctrine establishes that when the federal government created Indian reservations, water rights were reserved in sufficient quantity to meet the purposes for which the reservation was established." Source: <http://www.blm.gov/nstc/WaterLaws/fedreservedwater.html> (Accessed December 2011).

¹⁵ Tiber Dam and Lake Elwell provide flood control, recreation, and fish and wildlife benefits, along with municipal and industrial water supplies as part of the Lower Marias Unit of the Pick-Sloan Missouri Basin Program in north-central Montana.

whether it had a high outlet works or a low outlet works would determine whether the fishery downstream was going to be a walleye fishery or a trout fishery. So you had Trout Unlimited on one side of the issue, and what is called Walleye Unlimited, on the other side of the issue. And because of that debate which could not be resolved, no lease was ever granted, and the site was never developed. And our folks just could not understand how that can happen because they are the other side. In Colorado they had the most unique circumstance come up on the Arkansas River and we were only involved in this tangentially, but we released water in the Arkansas River for the Fry-Ark Project,¹⁶ and we were open to scheduling that to meet the needs of the river. We had a lot of latitude and we wanted to accommodate the needs of the river. So B-L-M was trying to come up with what the right operating scenario would be for the Arkansas River. And what they found out was river rafters who want a white water experience, wanted higher flows during their peak season to enhance the experience of rafting, and their acting as a very large industry on the Arkansas. At the same time, the trout interests wanted low flows because it increased the biomass in the trout, made the trout bigger and healthier.

Storey: I think Western Resources Wrap-Up did an article on it.

Glaser: Sure, and the debate, the cute thing that came out of it, that captured everyone's attention of course, was that was dubbed Wade versus Row (laughter). And our folks find ourselves in the middle of that and they go, "How can this be, you know, because those folks used to be on the same side of the issue." And we find ourselves where cities and farmers used to be on the same side of the water consumption issue with the environmentalists, now we find ourselves with environmentalists lining up with the cities against the farmers to free up water, and they form different coalitions. And so the ground rules of the past are not the ground rules of the future. I think the intriguing thing in this for Reclamation is, the kind of nice thing is, is it allows us to break from our historic relationships, to which we were bound to a great extent politically and publicly, and allows us to take a more honest, allow us to take a more open position in resolving these public issues. And we don't have to have a constituency because we have a public constituency. And see Reclamation's never had a public constituency. Remember when I started in the very beginning and said I went to the Sun River Project and lived on the Huntley Project and had never heard of the Bureau of Reclamation, I mean I lived in these places. That was because Reclamation didn't care about the public perception because they had a congressional constituency. Well the congressional interest has changed, and we no longer have a congressional constituency. Some folks say "Well, this is bad," and I'd say, "No, this is good," because we have the opportunity to replace them with a public constituency.

Storey: What kind of public constituency do you see?

Glaser: I see all of these people that you see driving up and down the streets of your community are our constituency. All we have to do is go capture them. They all have an interest in water. Everybody who lives in the West, has an interest in water, every one. It is the one thing that is

¹⁶ The Fryingpan-Arkansas Project is a multipurpose transmountain diversion that takes 69,200 acre feet of water from the Fryingpan River along Colorado's West Slope to the Arkansas River and provides 80,400 acre feet of municipal and industrial water to Front Range communities and supplemental irrigation water to 280,600 acres in the Arkansas River valley. For more information, see Jedidiah S. Rogers, "Fryingpan-Arkansas Project," Denver: Bureau of Reclamation, 2006, www.usbr.gov/history/projhist.html.

common to all people. And the scarcity of water in the West and its distribution, its somewhat an inequitable distribution. People tended to live and congregate maybe where nature didn't intend them to be, because there isn't an abundance of water. And some of our abusive practices as a society as it relates to water over the last 100 years has driven water to be up, water's going to be one of the premier western issues of the next 20 years. And it's not going to be a special interest issue, although the special interests are going to be very active and very concerned, it is going to be a public issue. You saw what happened on Two Forks. Two Forks became, which was of course going to be the water supply for Denver, the new water supply for Denver, Two Forks became a public issue and it was ultimately resolved in a public forum, through public vote. And the time has come for us to accept the fact and recognize the fact that water is going to become a western issue of importance and interest to every person who lives in the West. And it's time for us to rightfully assert our place in that public decision making process, we have an obligation.

We've spent 16 billion dollars of the taxpayers money over the last 91 years building, what in the world, would be an unprecedented water system. There's nothing like what the Bureau of Reclamation has built anywhere in the world. Not built by the Corps [U.S. Army Corps of Engineers], not built by T-V-A [Tennessee Valley Authority]. T-V-A might come the closest, but it's just small and regional. We've built a phenomenal storage capacity throughout a 17 state . . . half of the geographic area of this country, and there isn't anything like it in the world. And it creates an obligation for us as an institution to go out and assure ourselves that this investment, by the public, we want to say it's by the water users, it wasn't by the water users, the investment was by the public, the water users paid back only a very small portion of the investment. I'm not criticizing them of that, that was the national policy, but it is a fact. This investment, by the public, we need to go back today and make sure that it is serving the public interest. Now, I'm not suggesting that we walk away from irrigation service. I think most folks do not want that, there are extreme people that say . . . I went to an annual meeting of Audubon, I was one of their guest speakers in Kearney, Nebraska, a few years ago, maybe 1989 or so, and I was kind of an odd person there, I was the only one who kind of looked like a developer in the whole group, and when I was done with my presentation . . .

END OF SIDE 2, TAPE 1. SEPTEMBER 23, 1993

BEGINNING OF SIDE 1, TAPE 1. OCTOBER 12, 1993

Storey: This is Brit Storey, senior historian of the Bureau of Reclamation, interviewing Deputy Commissioner Don Glaser, in his offices in building 67, at the Denver Federal Center, on October 12, 1993, at about 2:00 in the afternoon. This is tape 1.

One of the things I'm interested in exploring, you mentioned that in your youth you were raised in rural Orange County, and in Great Falls I believe (Glaser: Yes), what was your family doing that was causing you to be out in rural areas like these.

Growing Up in Rural Communities

Glaser: My father was a construction worker when we lived in Southern California, and of course, Southern California was a real growth community at that time, and because he worked construction, he could choose to live where he wanted to live and so we moved out away

from Long Beach where my family lived, into what was then a rural community, which was Westminster, California, and I think just to get away from the city and raise his kids in the country. There was a slug of us, there was seven kids and just wanted to raise us in a more rural environment. He was from Loveland, Colorado, and so he was just interested in a more rural setting for his family.

Storey: When you say construction, what kind of construction?

Glaser: Oh he did a lot of things but, principally after the war, he was into home and school construction, he was a carpenter . . . and a contractor.

Storey: When you say Westminster was rural, could you describe what that means to you?

Glaser: Oh yeah. The street I lived on which was Yawkee Street, was located maybe a half mile off of what we called Beach Boulevard then, which is Highway 39, which was the main highway through that part of Orange County at the time. It was just a four-lane road, not divided, stop lights at every third or fourth block like you'd have in most rural areas. The street we lived on was principally made up of truck farms. We had a chicken farm right next to us that raised chickens for eggs. Across the street was an alfalfa field which they cut alfalfa for sheep, and there was a lot of dairy farms out in that area at the time; quite a dairy industry in Orange County. And of course they raised a lot of citrus fruits out there, orange trees and lemon trees, but principally orange trees, hence, the name Orange County. Throughout the area were just these small, independent farm operators, and we had the kind of run of the area. We would play on everybody's farm property and . . . There were no tracked homes or subdivisions as we think of them, they just weren't out there in that area at that time.

Storey: Were these irrigated farms?

Glaser: Yeah. For the most part it was a very dry area and they irrigated with wells out there and they had quite extensive well systems. Fact is, as kids I can remember us going to these wells, which would maybe have about an 8-foot standpipe. It was about 6-foot concrete pipe and about 8 feet above the ground, and they would pump into these open wells and the water wouldn't be down very far and all the fields would have one of the standpipes. They would have a bamboo section on a string, and you could lower it down into the well and dip water for drinking. And we'd just drink water out of these open wells that were for irrigation. In fact, our house was on a well, we just had a well punched down in the sand out there for our domestic water system.

Storey: You mentioned when you moved up to Great Falls, I think you called it an 18,000-acre farm . . .

Glaser: Yeah. We married into a farm outside of Billings, and actually, it's more appropriately called a ranch, and my brother still lives on the ranch today. We raised cattle and dryland wheat and—it was just what we did.

Storey: So it wasn't an irrigated farm?

Glaser: No.

Storey: When you were out on Sun River during the summers, these were camping trips, you were visiting relatives?

Glaser: No, we would go up there and camp on the edge of the Bob Marshall [Wilderness Area], along the Sun River, either along Gibson Reservoir or along the Diversion Reservoir, or we would just spend a lot of time out at Willow Creek Reservoir or Pishkun Reservoir, which are water supplies for the different projects out there. Mostly we were trout fishing and just enjoying the wide-open space of the wildernesses of Montana. We'd go up there in the Sun River Canyon hunting in the fall too, and we'd go ice fishing in the wintertime on Nylon Reservoir or Pishkun Reservoir.

Storey: But you weren't much aware of them as Reclamation's

Glaser: Never even gave any thought to why they existed . . . where the water went or what anyone did with it and I just never really thought about that.

Storey: When you went work for Reclamation, and you went into the Personnel Office, what were the major kinds of issues that you were having to deal with in that office, in terms of first personnel at that time?.

Issues Encountered Entering Reclamation

Glaser: Well, when I went to work for Reclamation, actually I went on a rotation program for the first 9 months or so, and just rotated through a bunch of different offices, as an orientation to the Reclamation program. And it was only at the end of that developmental period did I get placed in personnel. It was an interesting time, by the time I was placed in personnel, it was right at the time the Carter administration, President Carter was elected and shortly thereafter, we had the Carter "hit list" and the Energy Act in the late '70s that setup the Department of Energy and Western Area Power Administration. And in the Upper Missouri Region, where I worked, the issues that we dealt with principally were reorganizations and downsizing. We went from an office with 1,100 people in it, in parts or all of just four states in the Upper Missouri Basin, to an office with just barely over 300 people. And had to accomplish that through a series of office closures and function transfers. In fact, when they setup Western Area Power Administration, I think we probably transferred to Western Area Power Administration, 350 of their original 700 employees out of our Region, including our regional director, Bob McPhail, who went on to be the administrator at that time, the first Administrator of Western Area Power Administration. So the initial issues we were dealing were just office closures and down-sizing.

Storey: Were you in on how those decisions were made?

Glaser: Oh yeah. I did a lot of work in support of when and how we should close office and the structures of the different offices. It was a very educational time, a very maturing time, also a very hard time, because you were affecting a lot of people's lives personally and they were your coworkers. And you affected their lives forever. It was an emotional time. It was the

first real time that we were publicly challenged I think, for our program, I mean in a serious manner. With the Carter "hit list" and the identification of a number of Reclamation's preeminent projects at the time, as not worthy of public investment. And that was a very difficult thing for us to deal with as an institution. We viewed those as extreme values or extreme positions at that time.

Storey: Looking back on that from where you sit now, were they extreme positions?

Glaser: Oh, certainly for the time, they represented an extreme departure from the historic politics of Reclamation projects, but the values behind them would have to be viewed as mainstream public values today. Certainly, when the environmental laws were passed in the early '70s, late '60s and early '70s, NEPA [National Environmental Protection Agency] and the Endangered Species Act, Clean Water Act, I think by much of the developmental community, Reclamation included, those were viewed as representing extreme positions, with the next big flood or the next big drought those extreme values would moderate. But I think its clear 20 years later that those were not extreme values but evolving public values, here in fact, the mainstream values of public today, and probably the mainstream values of the average Reclamation employee. So its been a tremendous evolution in how we view the public interest in the last 20 years. Its been a great time to work for Reclamation if you enjoy the study of public policy and evolution of public issues. And maybe just the tip of what we might see in the next 10 years. I think the next 10 years are going to be the most exciting for Reclamation.

Storey: In terms of setting public policy?

Glaser: In terms of the way the public views and values the investment we've made over the last 90 years. And in setting new policies for how Reclamation projects contribute to society as a whole, in the West in particular. I think its going to be an incredible time of change.

Storey: The public interest is one of the questions I want to ask you about and since you raised it now, why don't we deal with that. I can go out and talk to an irrigation administrator, talk to an environmental person, talk to a state government, and every one of them is going to have a different public interest that they value per Reclamation. One of the things that I think is important for us to have on the record, is how do we determine which is the correct public interest, how do we chart the course through these murky waters, if you will?

The Question of Public Interest

Glaser: Oh, I think first of all you can't say what it is the right public value for Reclamation, because Reclamation's nothing more than an organization, or institution, that's supposed to carry out a very narrow public interest in just the western United States. But I think what you really have to do is focus on the public interest as it relates to public resources, water being one them. I think if we look at the issue of water, you're going to find that at least in a general sense, the majority of people will hold very similar values. And that is, I think you'll have a hard time finding anybody, be it an irrigator, or a municipal manager, or an environmentalist, or a sport fisherman, or a white water rafting enthusiast, I think none of those individuals will suggest that we should knowingly and willfully degradate the quality of our western water or our water in general. Nobody wants the water to be depleted to the point that it no longer will sustain the

natural systems in the West. Nobody will want to see the quality deteriorated to the point that it becomes a liability to the public instead of this incredible asset that we understand it to be.

Its only when you get into those very specific instances where you have one individual's interest up against another individual's interest do we debate the merits of the public decision. But generally, we live in the West because we love the West, otherwise we would live somewhere else. And the things that we love about the West are inextricably tied to the natural resources of the West, be they land, or water, or timber. And we don't want to see those exploited, I don't think any of us. So it's a matter of what is the right balance of use that still allows for sustainability of the natural resource. I mean, we want to leave, we want the natural resource to outlive us as individuals, otherwise we're borrowing from our children's well being, and none of us want that to happen. So I think its rather what is the right balance of use that still allows for sustainability of these natural resources that have made the western states, and the United States in general, the envy of the world. We've been blessed to have such a natural resource abundant area to live in and to govern. But with that also comes a responsibility to protect the sustainability of the abundance of that resource for our children and our children's children. And I think most folks will agree on that, so I don't think there is this issue as it relates to the general value of water resources. It just gets down to resolution of this specific issues.

Then unfortunately in our society, that generally turns around economics or financing. We'd all go out and clean up our waters if nobody had to pay for it. But now, see at least we're not dealing with the principal, we're only dealing with the practicality of financing it. And nobody would be opposed for the federal government, nebulous they going out there, and resolving all of these problems, its only when we have to say, "No, no, we cannot really do that in all clear conscious," and we try to find a responsible party to try to deal with it, that it becomes much more difficult to deal with either politically or practically. We'll have to find our way through that issue, and that is how we deal with the shared responsibilities for mediating mans intervention in the West. That will be the challenge because of the general taxpayer cannot afford to pick up the tab for mediation of all the actions of man in the last 200 years or 150 years since we've had industrializing in the United States.

Storey: When you were working back in personnel and down-sizing by almost 75 percent of the staff, was that the Regional Office or was that the entire regional staff?

Repercussions from Carter "Hit List"

Glaser: That was the entire regional staff. In fact, we ended up having to close field offices in entirety, some of those being very difficult. We closed an office that we had in Huron, South Dakota, and Huron, South Dakota, was a little town of 10,000 people and we employed 340 people in Huron, South Dakota, and Redfield, South Dakota, and Mitchell. And little towns you've never really even heard of, and we ended up closing the office in Huron. And that was because that was the headquarters of the Missouri-Oahe Projects Office and of course, the Oahe Project was on the "hit list." And the citizens of South Dakota decided not to fight the administrations position on Oahe and we just closed the doors in the late '70s on the project. In fact, the project has never been rejuvenated as a matter of interest in South Dakota since. We abandoned 14 miles of partially constructed canal, and if you go out there today you will

see leaving the Missouri River and wandering off across the prairie, 14 miles of excavated canal that's re-vegetated and just looks like a scar across the plain and wonder what that's about. We tapped on the side of the Corps' powerhouse at Oahe Dam, the outside structure for the Oahe Pumping Plant, and never did install the pumps. The pumps are in storage yet today, because we just stopped, and ended up closing an office down in a very small town, which even exacerbated our social problems, because it had such a large impact on such a small community. And our employees who left held houses forever, some of them may hold houses yet today here in South Dakota, that they just couldn't sell. But that was the practicality of what we did. In Bismarck at that time, had 320 people in the office and they were the headquarters for the Missouri-Souris Project, which is of course, the Garrison Diversion Unit, and today they probably only have 50 people there. And so these were large offices that went to small offices. And the Regional Office took a proportion of the reduction in Billings, Montana. And so it was just sort of across our regional area.

Storey: Were there other ways that economies and personnel could be made? Did we transfer a lot of O&M [Operation and Maintenance] of the projects to irrigation districts or . . .

Glaser: Well that had already been achieved. For the most part, when we complete a project, we transfer the O&M obligation, for certainly the single-purpose facilities, to the districts, and they maintain them with their own staff. So that really wasn't much of a consideration. More of what we were doing, is we were out-placing a lot our people to other ongoing construction around Reclamation, many of our people went to Central Arizona Project because if you go look, that is about the same time that Central Arizona Project was being staffed up 20 years ago to carry out, that was a new project then. It was the new project, and we sent a lot of people to the Central Arizona Project from both North and South Dakota. Then we sent many people to Western Area Power Administration. It was an opportune time for out-placement, we were very generous with the people we transferred, because we didn't have a program to support them and it was just the compassionate thing to do. It was the right thing to do.

Storey: Was there a RIF (reduction in force)?

Glaser: Oh yeah. There were numerous RIFs. We became quite expert at running RIFs. If you can become an expert at running something. And you know, a RIF doesn't have to be a malicious activity. A RIF is intended to protect the interest of the employee, the employee's right, that's why you have a RIF. It allows people rights to jobs based on criteria that's supposedly objective and takes management subjective decision making out of that and protects the individuals right. And by aggressive out-placement, we were able to place those folks that didn't have an opportunity to retain their job locally.

Storey: Well, for instance, was this down-sizing completed by the time you became the division chief there?

Glaser: No. We went through 15 years of kind of constant organizational change in that office, because we had projects that continued to complete. We had a project at Riverton, Wyoming, that had about 40 people there working on the rehabilitation and betterment of the

Riverton Unit.¹⁷ That office is closed today. We completed the activity and we just closed the office. So we continued to go through a series of adjustments, but in the meantime we ended up with the rehabilitation and betterment of Bel Fourche. And we were able to move all the people from Riverton to Bel Fourche,¹⁸ and they were able to become the core office there and continue to do what they did well. In the meantime, we were able to get the authorization to build the Shoshone Powerplant and raise Buffalo Bill Dam¹⁹ as new legislation, and got the state of Wyoming to put up \$47 million in cold hard cash, to contribute to that activity, its cost sharing, that was when cost sharing was real popular in the early '80s. And we went out found cost-sharing partner to put up 43 percent of the money in cash and Wyoming had some surplus and they wanted to spend it on water development and that seemed to all line up. So that was authorized, and we were able to move some of our people there to complete that. And of course interestingly, we just dedicated the completion of that just this last September the 25th, just last month. So we saw that become authorized, opened an office, built the facilities, and now dedicated the new facilities. So it was in a constant change. In 1985 the decision was made to consolidate the Lower and Upper Missouri Regions, and the Billings Office was chosen as the regional headquarters for that consolidation, and we helped close the Denver Regional Office and assimilated all their programs. Then of course, 3 years later we closed the Amarillo Office, the Southwest Regional Office, and we picked up all of Oklahoma and Texas, and we managed that office transition also. So we became quite good at transfer functions, reduction in forces, as a mechanism for adjusted workforce.

Storey: From your new seat in the organization, do you think putting the Regional Office in Billings instead of someplace else was a good idea?

Closing Down Regional Offices

Glaser: Oh, from my seat even at the time, I thought closing the Southwest Region was not the thing to do. If it would of been my decision I wouldn't have closed the Southwest Region as an organization nor the Amarillo Office, as the Regional Office. I would have forced them to down-size to a size the program would support. Its just the a long ways from Billings, Montana, to Brownsville, Texas, and if you would've put the regional office in Denver, which wouldn't have been any smarter, its still a long ways from Denver to Brownsville, Texas (laughter). It's a long ways from anywhere to Brownsville, Texas. And I mean its just too big a geographic area, it is a big geographic area. It's geographically dispersed. I think we did a very good job of assimilating the program. The fact that there was no real political interest in that, nor any political ramifications, fallout from it, suggests that we continue to provide very good expertise and support. It required us to get out ahead of the curve though in empowering the field, because the Region was very large . . . we ended up giving a lot of

¹⁷ Located in central Wyoming, the Riverton Unit provides irrigation water from the Wind River to approximately 71,000 acres. For more information, see, Robert Autobee, "Riverton Unit: Pick-Sloan Missouri Basin Program," Denver: Bureau of Reclamation, 1996, www.usbr.gov/history/projhist.html.

¹⁸ One of Reclamation's oldest projects, the Belle Fourche Project serves 57,068 acres of irrigated land in western South Dakota northeast of the Black Hills. For more information, see Christopher J. McCune, "Belle Fourche Project," Denver: Bureau of Reclamation, 2012, www.usbr.gov/history/projhist.html.

¹⁹ Authorized by the secretary of the interior in 1904, the Shoshone Project provides full and supplemental irrigation water to over 100,000 acres in northwestern Wyoming. The project's primary feature is Buffalo Bill Dam, constructed in 1910, is 350 ft. high with a storage capacity of 646,565 acre feet of water within Shoshone Reservoir. For more information, see Eric A. Stene, "Shoshone Project," Denver: Bureau of Reclamation, 1996, www.usbr.gov/history/projhist.html.

authority to our field offices. It went to an area concept much earlier than the rest of Reclamation.

Storey: And this would of probably been while you were the assistant regional director?

Glaser: Yes, it occurred through that period of time.

Storey: So, throughout your tenure in Billings, you were going through this continual process of downsizing, resizing, readjusting personnel, and so on.

Glaser: Yes.

Storey: Were there any other major issues going on that you think of now?

Glaser: Well, other than the "hit list," and the termination of the Garrison and the Oahe and the Narrows, O'Neill projects and the prominence of wetlands becoming an issue during that period of time. We had jurisdiction of over North Dakota, and North Dakota has probably the . . . lion's share of the remaining prairie potholes of the central part of the United States. And we dealt with the evolution of wetlands as, interior wetlands, as an issue in this country, and watch North Dakota adopt, move from a policy away from draining wetlands to make them farmable to passing a law that said that they would support no net loss to wetlands in their state—a tremendous evolution. We were able to watch the country deal with the struggle for maintaining and preserving the Central Platte [River] in Nebraska, as we were studying our way through Prairie Bend as a project plan that we were looking at, and dealt with the controversy associated with Two Forks,²⁰ the Denver Water Supply Project; and Deer Creek, a water supply project in Wyoming. And now we're going through section 7 consultations on our operating projects as it relates to the Central Platte, which is a critical component to the success of all the migratory birds on the Central Flyway, including endangered the whooping crane, least terns, and piping plovers. We were just able to watch much of the . . . social value evolve relative to endangered species and the value of riparian habitat and riparian wetlands and other interior wetlands like prairie potholes. And it was a very fascinating time.

Storey: You say watch, but do really mean that or do you mean you participated in this?

Reclamation's Importance Toward Bringing Public Understanding to Many Issues

Glaser: Sure. You couldn't help but participate. In many instances, we were at the heart of the coalitions that help bring public understanding to many of the issues. On the Platte River, we formed an outstanding relationship with the Fish and Wildlife Service [FWS] in the Crane

²⁰ In 1986 the Denver Board of Water Commissioners applied for federal approval to construct Two Forks Dam on the South Platte River 25 miles upstream from Denver. Plans called for a 500' to 600' dam with a storage capacity of 1.1 million acre feet. In 1990 the Environmental Protection Agency rejected the Two Forks proposal. "EPA concluded that each of the Two Forks dam proposals would significantly damage fisheries and recreational areas, and that this loss was avoidable because there were less environmentally damaging alternatives to Two Forks." In 1996 a federal judge upheld EPA's decision. See Denver Water Board and Metropolitan Water Providers, "Two Forks: Environmental Protection and Mitigation Plan, June 1987; www.justice.gov/opa/pr/1996/Jun96/271.enr.htm, (Accessed June 2014).

Maintenance Trust.

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BEGINNING OF SIDE 2, TAPE 1. OCTOBER 12, 1993

Glaser: . . . pulling for species protection on the Central Platte [River]. Much of what's understood today about the needs of the migratory birds is based on the work that we did cooperatively with these, what would have been historic, historically contentious elements of society that now became our cooperators. Same thing in North Dakota. Up until 1986, we had open adversarial relationships with the Fish and Wildlife Service over the values of wetlands and the need for migratory bird production from the prairie pothole region. We formed new relationships with the Fish and Wildlife Service where now we're standing partners in the protection and restoration of wetlands in North Dakota. So it was a time of building new partnerships and trying to broaden out our understanding of the issues, to embrace all the public interests, not just our historic special interests.

Storey: As Reclamation was engaging in those kinds of new activities was there a change in the makeup of Reclamation's personnel that you noticed?

Glaser: I didn't see a change in the composition of the workforce, although we could of stood to bring in new disciplines and redistribute how we used our resources in different areas of disciplines. We could of used more biologists and hydrologists. No, what I really saw was the evolution in the staff that we had onboard, kind of like a rebirth of many of our people as they began to grow and mature as it related to water issues. We had many of our people who would have seen Indian water rights and the protection of Native American interests in water as being an adversarial issue to deal with, becoming the people most trusted by many of the Indian nations in our area, to help bring about resolution of long-standing Indian problems. And so, it was just kind of a growth experience for our existing staff. It was amazing how quickly and how expertly they rose to the occasion. Reclamation has a very competent workforce and most often, we lacked clear leadership . . . and a willingness to go out publicly express our position. Given that, we were able to bring about significant changes.

Storey: Were there any Native American water rights issues that you were personally involved in?

Native American Water Rights Issues

Glaser: Yeah, many. The work on the Wind River was probably the one where our Region was most actively engaged in resolution of the Wind River water right issue. More than that, in North Dakota and South Dakota as part of the Garrison Reformulation, the three affiliated tribes of the Fort Berthold and the Standing Rock Sioux and the Fort Totten Indian reservations were all afforded certain developmental opportunities under this reformulation of Garrison. We found ourselves, as Reclamation, with a new responsibility for providing economic growth and infrastructure for Indian reservations as part of our principal responsibility. And it meant that we needed to go develop new relationships with the Aberdeen Office of B-I-A and go out and develop personal relationships with the tribal councils and the tribal leadership, because Reclamation was not one of those institutions they would have embraced coming through the door. We never did protect their interests very well, and they had no relationship with us or

no basis for trust. Our staff out there was just incredibly successful of going and developing the relationships it took to bring about the benefits they were entitled to. In fact, that spilled over to the Oglala Sioux on the Pine Ridge Reservation as it relates to the Mni Wiconi Project which is an Indian/non-Indian water supply for domestic water . . . rural domestic water system. Where we are the facilitators of resolution between the Indian and non-Indian interests in the area when they would run up an impasse, our folks were the ones who were able to bring about a closing of the gap and replacing it with common interests instead individual interests.

Storey: In addition to providing negotiation services, I guess you could call it, were we providing new sources of water?

Glaser: Sure. In fact, we became quite the problem solvers. I know on the Pine Ridge Reservations they had an immediate water supply problem. I mean it was really a sad situation when folks have to rely on people delivering water in 5-gallon buckets to households for use for their domestic water supply and its hard to think in this almost 21st century, we still have people that have outhouses and no indoor running water. And they were saying just how wonderful it would be if they had a truck that they could haul bulk water in and deliver water like they do everywhere else and we just went out and found them a truck, so that they could meet their water supply problems, while we were finding a more permanent solution to their water supply. It was only through those small gestures, and that's just such a non-consequential act, but it was something that we did and we did with no fanfare, just went and did it because it was the right thing to do, and bought us a lot credit out there. We were able to understand that we're willing to accept that as a sovereign nation, that they had the right to determine their own self interest and that's a hard thing often for federal government representatives to understand including the Bureau of Reclamation . . . and to accept them as a sovereign nation and let them make their own individual determinations. And we pushed the envelope a lot on what Indian self-determination contracts should look like under 630 Public Law, the Public Law for Indians helped our determination. We pushed a lot of those 638 contracts through and would be tribe that were somewhat unprecedented.

Storey: Do you remember any other examples of Native American projects that you worked on? Blackfeet maybe?

Glaser: I can remember earlier on before we were quite so enlightened, we had a situation with the Blackfeet where we took water out of Lake Sherburne and exported into the Milk River. And they thought they had an entitlement to the water and we weren't real open to that and we never did bring closure to that while I was there. A lot of that remained kind of a contentious issue for us.

Storey: I think my notes tell me that you went to Washington as the assistant commissioner for administration?

Glaser: Yeah.

Storey: That post has been out in Denver for a long time, what happened?

Working in Washington, D.C.

Glaser: Well in 1989, when Bill Klostermeyer retired, I was asked to go back and fill in until they could find a replacement for him. It was an interesting time because it was right at the time that President [Ronald] Reagan was leaving office and President [George H. W.] Bush was coming into office. And we were having a change of administration even though it was Republican to Republican, and Commissioner Duvall was the commissioner when I went back there and he was there for probably 4 months before he left, and Joe Hall acted as commissioner for a period of time and then Dennis Underwood came in, all during the time that I was acting, or just filling in for Bill Klostermeyer. The job was assistant commissioner for administration and I supervised about 900 people, 850 of which were located in Denver. The issues were really interesting, it was interesting to go into the Washington Office and be the senior careerist, being the highest career position in the Bureau of Reclamation in the Washington Office and not holding the highest position within the organization. Normally, if you're the highest careerist in Washington, you're also the highest ranking careerist within the Bureau, because Washington is the seat of most power for public institutions, federal public institutions. When I went back to work in Washington, I sat two doors down the hall from Dale Duvall, the commissioner, but I worked for Joe Hall in Denver. And Joe Hall worked for Dale Duvall, so we had a supervisorial chain that went something like this: Austin Burke²¹ in Denver, who was the deputy assistant commissioner-administration, worked for me, yet he sat two doors from Joe Hall. I worked for Joe Hall, although I sat two doors from the commissioner, and Joe Hall worked for the commissioner. So you had this zigzag supervision. Well, when Dennis Underwood came in as commissioner, one of the things that he did fairly early on in his tenure, was to correct that, he said, "No, that ought to not be how it works, we'll let everybody in Washington report to me and we'll put all the administrative folks in Denver underneath the assistant commissioner for administration," and they hired Margaret Sibley to fill that post. They also left me in Washington long enough that I gave up on trying to get back home, I was there 11 months acting before I finally agreed to transfer back there, it's not a place I really wanted to work, nor did I want the family to live in the Washington area. We were quite happy in Billings. My wife was a Billings native and my kids had lived in the same house their whole life, and that was kind of a nice way to raise a family. But I finally agreed to go back to Washington on a permanent basis and Dennis Underwood selected me to be the assistant commissioner for what was then, program, budget, and liaison, and head up the Washington staff.

Storey: What was that assistant commissioner's area of responsibility?

Glaser: The role I served, was I was sort of Dennis Underwood's principal helper. I was his staff assistant, he called me his chief of staff, and I would just help him manage the issues that found their way into Washington. In addition to that, I was specifically responsible for budget formulation and program formulation, the budget folks worked for me, and we had foreign activities and contract administration, other functions that resided in the Washington Office.

²¹ J. Austin Burke was assistant commissioner-program, budget and liaison from 1991 to 1994. That position was eliminated under Reclamation's reorganization in 1994 and Burke became director of operations from 1994 to 1995. Mr. Burke also participated in Reclamation's oral history program. See, J. Austin Burke, *Oral History Interview*, Transcript of tape-recorded Bureau of Reclamation Oral History Interview conducted by Brit Allan Storey, senior historian, Bureau of Reclamation, from 1993 to 1997, in Denver, Colorado, edited by Brit Allan Storey, 2008, www.usbr.gov/history/oralhist.pdf.

Storey: What were the issues you felt needed to be dealt with in you budgeting process when you became assistant commissioner?

Budget Review Committee

Glaser: Well, one of the things that I did as kind of a knowing and willful determination was, historically, Reclamation as part of the budgeting process, always had kind of the budget guru. I mean the person who was the deal maker for all the budgetary issues, kind of kept the informal scorecard from year to year on who gave up money one year and should be made hold the next year. And made all the budgetary determinations, set the priorities, and pretty much managed that program. And Bill Klostermeyer did that, he did that extremely well. When I went into the job I didn't want to do that, I didn't want to be the person that ran Reclamation's program from a budgetary perspective. I thought that was the responsibility of the regional directors and assistant commissioners and so, I refused to assume that responsibility. And we setup what we called the Budget Review Committee [BRC], which was made up of a regional director on a rotating basis, myself as assistant commissioner for program, budget, and liaison, the assistant commissioner for resource management, and the ad hoc member was the budget officer, Darrel Mach. And we would formulate the program on behalf of the E-M-C, the Executive Management Committee, the other regional directors and assistant commissioners, identify the particular issues that they had to deliberate, and then would put the issues in front of the Executive Committee in such a manner as they had the data they needed to make executive decisions on budget priorities, which is different than we had done on budget formulation ever, and forced us at the executive level, to become much more informed about the composition of our budget . . . and took that responsibility back away from the budgeting community who had done that historically under the leadership of Bill Klostermeyer and his predecessors. It was just a different way of looking at the budgeting process. We still do it that way today.

Storey: So that was a very conscious decision?

Glaser: Yes. And then my job in the Washington Office became more of one of managing the issues that found their way into Washington. They required the attention of O-M-B (Office of Management and Budget), or were on their way to the Hill or to the secretary for resolution, or involved other bureaus at the Washington level. And I would staff those issues out and make sure that they were dealt with by the appropriate offices in Washington and we'd try to get the decisions made that need to be made to move issues through Washington.

Storey: So this is a fundamentally different way of doing a budget within Reclamation?

Glaser: Yes.

Storey: Was that resulting from changes in Reclamation's mission and approach to doing things or was this just something that needed correcting all along?

Reclamation Needed New Approaches to Solving Problems

Glaser: Well, it was something I thought needed to be corrected, and it also was something I thought

needed to be done if we were going to come into these times we face today, where the budget was going to be much more dynamic and driven not by large construction activities, but more by resource management needs. And if you were going to have these resource issues that are going to be coming up on an individual basis, that we needed some mechanism to deliberate the priorities of these different issues. And we had to be able to do that at the executive level if we were going to put the budgetary priorities where they belong. And so, it was one of those things that again, I thought needed to be changed, not only based on my historical observation, but also based on the fact that I thought there was a different program coming in the future that was going to require a different decision-making process.

Storey: The shift from being a construction agency to being a resource management agency, does that have fundamental implications for the amounts of money budgeted and the way the money is budgeted, and if so what are they?

Glaser: Oh yeah. I think it is going to be the most significant fundamental change for Reclamation in the future, and it's the one that we haven't quite fully understood the implications of today, and I mean this specifically. Historically, we've had a fairly predictable budget, and if you've looked at our construction program which made up the largest component of our budget, it was made up of very long-term civil works projects. Central Arizona Project was a project for 20 years in Reclamation and the work was scheduled out to some degree or another over a 20-year period of time. The same was true for the Central Utah Project, and the North Loop Project, Columbia Basin Project, the Garrison when it was being funded, and these activities we could look at, and not only the quantity of work and the dollars associated with that work into the future. But we also knew the specific nature of that work. We knew when certain contracts would have to be awarded, therefore, we'd be able to back up and know when we'd have to have the specs done to award the contracts, and we could back up and know when we'd have to have design data collection initiated, and we could construct very reliable schedules. We could do the same thing in the O&M program, the Operation and Maintenance program ran at a relatively steady pace, very predictable, and we could manage within that. And we had general administrative expense appropriation available to us in a very predictable amount, and that made up 95 percent of our entire budget, very predictable.

As we stand today and look forward, the one thing that is going to be different is the predictability of our appropriation, and in fact, financing Reclamation projects in the future I think will be fundamentally different. We will rely less on appropriations and more on nontraditional, financial mechanisms, whether their revolving funds or whether they are financing tools, but its cost sharing and our partners go out and bond money to cost share like they're going to do on the Shasta Control Device.²² So the manner by which we seek financing to support our project activity is going to be basically different. And the predictability of the work is going to change substantially. We do not have long civil works projects that run over 10 or 20 years, but rather we're going to have things that come up, driven by resource circumstance, that will drive an immediate investment in identification of the resolution technique, and then designing that technique, putting the spec out, constructing it

²² Shasta Dam's Temperature Control Device controls water temperature below the dam to protect salmon, while minimizing power generation losses. For more information, see James H. Higgs and Tracy B. Vermeyen, "Shasta Temperature Control Device CFD Modeling Study," United States Department of the Interior, Bureau of Reclamation, October 1999, www.usbr.gov/pmts/hydraulics_lab/pubs/PAP/PAP-0845.pdf. (Accessed June 2014).

and being done with that and moving on to the next one, which we may not 4 years in advance, have any idea what the nature of the issue is going to be. Because the issue will be driven by some public interest in the resource itself, instead of the public interest in the construction of a civil works project. Its going to be so different that it's hard to even imagine for somebody with a Reclamation background, or a civil works background.

Storey: I know a lot of people are accustomed to the way ACRM [Assistant Commissioner - Resources Management] does budgeting, its small quantities of money and paying for very specific charges, do you think that's the coming approach to budgeting?

The Budget Process Requires More Attention

Glaser: Well, I hope we don't do it quite like their doing it because I think the process is too inefficient to manage small quantities of money. I think they've tried to take a process that was successful for assistant commissioner for engineering and research for scheduling \$2,000,000 to \$500,000, million dollar design projects and applying that to resource management project allocations where they're \$5,000 and \$10,000. And the process just requires more attention than the benefit from the managing of it. But I certainly think that type of work is the kind of work we're going to have to have business practices that allow us to do. I think we're going to have a lot more cost-reimbursable activities, where we have people putting their own money up, or we're going to have responsive and accountable, and its going to be individual accountability. I think we have to have ways to manage projects that are made up of small increments of internal and external financing, and we don't have those tools today. That's because we didn't have to develop them because we never had that kind of work, but we're going to have to have those in the immediate future. And I think the struggle that ACRM's been going through is only indicative, owning systematic of the problem that we have to solve.

Storey: Reclamation-wide?

Glaser: Oh yeah. Its going to be a Reclamation-wide issue. Its not going to be an issue just Denver has, its going to be one that strikes at the heart at how we do financial business in the future.

Storey: You mentioned that International and Foreign Affairs was part of your responsibilities in that new position, what were the major kinds of issues that were coming up, was that evolving because of our evolving because of our evolving role also?

Foreign Affairs

Glaser: Ah, no. It was just kind of chucking along and the interesting thing was when I showed up in Washington, we had all kinds of problems, International and Foreign Affairs wasn't one them. Sam Guy and his staff were charged to that office and they were very confident and very capable. And because of that, I went to Sam and said, "Look Sam, I'm not going to pay your program very much attention, not because I don't think its important, just because I don't have the time and you're doing a good job. So you just keep doing a good job, and I'll go take care of all these problems," and that's sort of what we did . . . and in the beginning. And Sam just kept running his program as he'd always run his program. It was one that only had nominal support above Reclamation, the State Department, and US-A-I-D [United States

Agency for International Development], and the World Bank often supported our activities, much to the disinterest of the Department and other executive offices including O-M-B. And it kind of remained that way. Folks in the Department, even including water and science, were not very interested in the foreign program, didn't see a whole lot of reason for Reclamation to be involved in it, and therefore, would not openly endorse it. So the work we did was kind of at the insistence of the State Department, or at the request of World Bank, where they were trying to protect their investment, or US-A-I-D.

Storey: And you say, Mr. Guy, was he here in the Denver Office?

Glaser: No, he was in Washington and he had a small staff in Washington, a dozen people or so, and they're principally program coordinators. They would draw on other Reclamation staff to actually go carry out the foreign assistance, and then they supervised the folks that were assigned overseas on foreign assignments, whether it was Brazil or Egypt.

Storey: During the time that you have been in Reclamation, you've worked with a number of commissioners, Beard, Underwood, Duvall, I presume that you probably knew Broadbent and possibly Dickinson. How would you characterize them and the way they worked . . . each of them?

Working with Commissioners

Glaser: Yeah, certainly each one of them was individually different and brought their own interests, their own skills to the job. Interestingly, all the commissioners that I've worked with have been committed to carrying out the Reclamation program in the most responsible way that they could. Commissioner Broadbent was a more traditional, interested in water development and water supplies. Dale Duvall was more administrative and saw his job as administering the program and was stuck with trying to figure out what to do with the Reclamation Reform Act²³ and rule making on new Reclamation law, which was no small undertaking. Dennis Underwood was . . . interested in the technology, very interested in technology, and technical resolution of water resource problems. So each one of them kind of had their own perspective on the issues, but all of them equally committed to trying to carry out the public interest as it related to western water as they saw it. Interestingly, you know every one of them was—I hold myself to be a very principled person and have very strong values as it relates to water and yet with these very different people, I could be equally committed with success of each one of them, because I had found them also to be principled people and were willing to share enough of their own interests to let you subscribe to what it is they were trying to do and try to help them do it in a responsible fashion.

Storey: Basically the same question for the chief engineers. I don't know how far you go back,

²³ In 1982 Congress passed the Reclamation Reform Act (RRA), which raised the minimum acreage allowed to receive project water from 160 acres to 960 acres, removed the residency requirement, and placed a limit on the leasing of lands receiving government water. The RRA recognized that agriculture had become more mechanized and industrialized and that 160 acres was too small for successful farming in the modern world.

whether you worked with Harold Arthur.²⁴

Glaser: In most my dealings with the Denver Office . . . all my earlier dealings were just at a lower level. I didn't move around, in rare air of the Denver Office until Darrel Webber²⁵ had taken over. Darrel Webber took over in the early '80s and was the assistant commissioner here in charge of ACER (Assistant Commissioner of Engineering Research) for nearly 10 years. So most of my dealings at that level were with Darrel, so I really don't have a perspective on that.

Storey: Bob McPhail you mentioned . . . what about him as a person, as a manager, and so on. I believe you spoke highly of him when you first mentioned him.

Glaser: Oh yeah. He was the regional director when I went to work in Billings, and a young man at that time and a very capable administrator. He was new as the regional director when I came to work there, and showed himself to be a very capable administrator and went on to be the first administrator for Western Area Power Administration, and showed extraordinary skill there . . . very effective in bringing a new institution into a successful role in power marketing. Because of him, Western shows much . . .

END OF SIDE 2, TAPE 1. OCTOBER 12, 1993

BEGINNING OF SIDE 1, TAPE 2. OCTOBER 12, 1993

Storey: Tape 2 of an interview by Brit Storey with Don Glaser on October 12, 1993.

The transfer of the transmission system, going from Reclamation, would've taken place I believe, sort of the late '70s. What were people in Reclamation saying about that when it happened? And then the second part of the question is what were your personal perspectives?

Establishing Western Area Power Administration

Glaser: Certainly setting up Western Area Power Administration was a hard thing for Reclamation to do. It took what was essentially our power division and our transmission function, and set it up as an independent operating agency and . . . distanced water scheduling and power generation from power transmission to power marketing. Although, a lot of folks found that to be quite troublesome, I think the separation was done in an incredibly effective manner. I'm impressed as I look back on it today how effectively that transition was made, and certainly a lot to be learned from that. It was one of those things where there was some emotional taxing there and some jockeying for authority with our historic constituencies, but surprisingly little

²⁴ Harold Arthur was the director of the Office of Design and Construction, formerly the Office of the Chief Engineer, from 1972 to 1977. Mr. Arthur also participated in Reclamation's oral history program. See Harold G. Arthur, *Oral History Interview*, Transcript of tape-recorded Bureau of Reclamation Oral History Interview conducted by Brit Allan Storey, senior historian, Bureau of Reclamation, during 1994 and 1995, in Denver, Colorado, edited by Brit Allan Storey, 2010, www.usbr.gov/history/oralhist.html.

²⁵ Darrell Webber was assistant commissioner-Engineering and Research (ACER) from 1982 to 1993 and participated in Reclamation's oral history program. See Darrell Webber, *Oral History Interviews*, Transcript of tape-recorded Bureau of Reclamation Oral History Interviews conducted by Brit Allan Storey, senior historian, Bureau of Reclamation, Denver, Colorado in 1993, edited and desktop published by Andrew H. Gahan, 2012, www.usbr.gov/history/oralhist.html.

from my perspective. I guess at the time the problems I saw were just problematic, my reaction was that it just came at a really bad time for us. It came on the heels as an organization for us of having Oahe and Garrison shut down as projects. We only had three real sources of funding in the Region, we had Garrison, Oahe, and the Transmission Division, and when we kind of lost all those at one time, it just created a terrible problem for us . . . programmatically and created a very difficult personnel problem in the Region. And so you didn't really have much time to reflect on it philosophically, you were trying to deal with the implications of it. As I look back on it today, I'm not certain how much benefit came from setting up Western as a separate entity from the Bureau of Reclamation. Certainly a lot of advantage came from setting up Department of Energy. On the whole probably a good thing for the public.

Storey: Why?

Glaser: Well, if you kind of remember back to where we were at as a country and what prompted the Energy Act. Energy sufficiency was an incredible issue in the mid '70s because we just came off the oil embargo and gas rationing for the early '70s. And we didn't have a very good national energy strategy. And at least with the establishment of the Department of Energy, it allowed us to have a focus on a national energy strategy and a cabinet-level presence as it relates to energy as an issue. I think that will become more important in the future, not less important, as we try to deal with electric energy, which is sensitive as we're going to be to many of the hydropower and hydrothermal generation-related issues. We're going to have to ultimately find a source of eclectic power that's conducive to our long-term interests. That's going to require a national focus.

Storey: The next step, of course, was coming in Denver but, one of the things I'm particularly interested in: why did they reach down into Reclamation and ask you to become the acting assistant secretary?

Becoming an Acting Assistant Secretary

Glaser: (Laughter) That's an interesting question. I think for several reasons. I'd just left Washington, I spent 3 years back there with this administration, with the former administration, with Secretary Lujan, and Assistant Secretary Sayer. I had a very good relationship with them. I think I was viewed as a confident administrator, a principled individual . . . and certainly knowledgeable on the western water issues relative to Reclamation. I'd just worked on the C-V-P [Central Valley Project] transfer negotiation with the state of California on the behalf of the administration, and I think that they understand how difficult of a situation that was, to be talking to the state of California during the presidential election where you have most electoral votes up for grabs and two senatorial seats up for election in the same general election. And us being charged with not letting that become a public issue through the entire campaign for those offices. I think what they saw was an ability to take an issue as difficult as that, and just stay with the public interest, do it in a responsible manner, and have it become a nonissue for 6 months, while folks of course were looking for issues. I think there was a confidence, a personal confidence. I didn't want to do it, I told John Sayer on multiple occasions when he asked me if I would be willing to do that, that I'd just moved my family up. I've been away from them a lot in the last 3 or 4 years, probably half my time in the last 4

years, I've been away from my family, literally living in motel rooms. And I was tired of that, and they were too and I didn't want to do it. I guess I finally acquiesced. I think the new administration, when Secretary Babbitt came in, he reconsidered all those appointments made by Secretary Lujan, those interim appointments, and I believe that I was confirmed because I have a very good track record with the whole water community. I have just as many good relationships with the Audubon Society, and the Federation, and Fish and Wildlife interests as I do with the N-W-R-A [National Water Resources Association] and the water interests as a fair administrator. I think they were looking for a fair administrator. They had a lot of very hard issues at the time if you look at what we were dealing with. We had C-V-P Improvement Act that just became public law, had the Glen Canyon Act²⁶ that just became public law, we had C-A-P [Central Arizona Project], which was becoming more and more visible and a very financially troubled project. Most of the issues for water and science were going to be the water issues, and so they wanted a Reclamation person as opposed to a G-S person [inaudible].

Storey: When we reached the end of the interview last time, we had just started on the question of how do we keep Reclamation from being captured by its past, so that we could move into the future, how can we evolve into the future. What are your perspectives on that?

Reclamation's Future Success Lies in Resource Management

Glaser: Well I think if we're going to be successful in the future as resource managers, first we have to accept the fact that we're resource managers and not a civil works construction agency. Historically, when Congress passed a law for us to go build a project, the construction of the project became the objective, and in the future that just isn't going to be the case. And what we're going to have to do is we're going to have to go out as an institution, and have public processes and an objectivity that allows us to look at these water resource issues and help determine the appropriate resolution. And it will just take an entirely different skill-mix and approach to public administration. And to the extent we're able to develop mechanisms and processes by which we can achieve that, we'll be successful. If we don't then, we'll become irrelevant.

Storey: Do you think its going to happen?

Glaser: Oh yeah. I think that we're committed to public administration, and we're committed to the western water resource, and we have the most skilled people to help bring about responsible change. I think we're also . . . probably the most moderate of interests, we're probably not anybody's most liked, but we're probably not anybody's least liked institution as it relates to western water. We'll probably be the least worst alternative to finding resolution to a lot of these issues.

Storey: Do you think this is going to come about using our current staff, probably down-sized and

²⁶ Public Law 102-575, the Reclamation Projects Authorization and Adjustment Act of 1992, became law October 30, 1992. The act contained numerous titles, each of which is given a separate name. Title 34 of the act is the Central Valley Project Improvement Act or CVPIA. The Grand Canyon Protection Act is Title 27 of Public Law 102-575, which charges Reclamation to operate Glen Canyon Dam to mitigate adverse environmental impacts, and to improve the values set for which Grand Canyon National Park and Glen Canyon National Recreation Area were established.

evolved, or do you see that we're going to need new types of skills and expertise in the agency?

Glaser: Oh the answer to that is yes to both of those. I think that its going to require us to use our current staff. I think we have some of the very finest professionals as it relates to water resource management of any institution in the world, and I truly believe that. But I also believe we're going to need different disciplines in the future and a different workforce, composition of the workforce that we've had historically. I think that its time for us realize that other resource management disciplines should be in leadership positions. Generally, we've been an organization that is promoted people out of the mainline disciplines like planning, design, O&M, construction management. And we're probably going to have to look for people who came out of land resource management, or in environmental sciences, or social science backgrounds to positions of prominence also, to get a balance. We've been a workforce generally made up of westerners and people out of the rural west, and I think more and more we need to diversify our culture and go find folks that come out of urban interests, and eastern interests, because they just look at water differently. And we need that diversity of public view as we sort out these issues.

Storey: Well, I appreciate you taking the time to meet with me and once again I'd like to ask you whether or not Reclamation and non-Reclamation researchers can use the tapes and transcripts from this interview?

Glaser: Oh yeah. I think, my only reservation that I have, I don't have any reservations about opening up anything I said for the record. The only reservation I had about questions you asked me and the only time I felt like I came very close to saying I don't have anything to contribute, is the reflection on individuals, whether they were the commissioners or the chief engineers. I'm not certain my perspective on the nature of the leadership of Reclamation in the past is very useful, but reflecting even what I said about the commissioners that I worked with and others, no, I don't have any problem with that.

Storey: Is there anything else that we should talk about . . . that I haven't asked you for instance?

Glaser: (Laughter) No, you probably go a whole lot more response than I truly have insight (laughter) so

Storey: I don't think that's true. Thank you very much.

END OF SIDE 2. TAPE 2. OCTOBER 12, 1993
BEGINNING OF SIDE 1, TAPE 1. FEBRUARY 6, 1998

Storey: This is Brit Allan Storey, senior historian of the Bureau of Reclamation, interviewing Donald R. Glaser, a retiree from the Bureau of Reclamation, on February 6, 1998, at about nine o'clock in the morning, in Building 67 on the Denver Federal Center. This is tape one.

Its been, now, four years since we talked last.

Glaser: That's amazing.

Storey: Actually over four years. After we had talked, you went off to the Bureau of Land Management [BLM]. Could you tell me about that and why you went and what was going on?

Working for the Bureau of Land Management

Glaser: That's pretty interesting. I never really intended to be a federal employee. That just wasn't something that—I took a summer job, like a lot of people, in college, and it was a good summer job, federal intern program, and with the intention of just getting through school and going into the private sector. But the job with Reclamation came along. Reclamation was a really interesting agency to me, as a westerner, and it was also a very good place to work. I liked the people. I liked the culture of the organization. I liked its constituency; and I liked its issues. Even though I did not intend to have a federal career, I was continually given these wonderful opportunities to work on really great issues, so I just stayed.

By the approaching mid-1990s, 1993, 1994, I just was restless to leave federal government. I'd done everything there was to do in Reclamation; I mean I'd sat in every chair that interested me, and I didn't know if I had ten years of good, substantial federal service left in me. So I wanted to just see what was outside of government. I was going to leave government, and told the commissioner I was going to leave. That was when I was like forty-seven years old.

I told the commissioner I was going to leave, and he said I should talk to the secretary because I was working on some secretarial issues. And I was asked what it would take to entice me to stay. I said, "Nothing you really have to offer. I guess I would stay if I could be the state director for B-L-M in Colorado," but they had one at the time, so I didn't think much of that.

Then, lo and behold, a few months later they offered me the job. I accepted it, even though it was another federal job, because it was so different, I thought, than working for Reclamation. I didn't stay very long at the B-L-M; I stayed a year and a half. It was actually one of the very best jobs I've ever had, the state director for B-L-M in Colorado. Its prestigious; they paid well; I got to live in Denver. I had a program that was small enough—it was just the state of Colorado—so the politics of it was very manageable. You worked with one governor, one delegation. I loved the constituents, these public-land ranchers, because they're just the salt of the earth, very much like public-works farmers that I worked with in Reclamation. A lot of them were the same people, because they'd run cows and raise alfalfa.

Wonderful resources. Got to work a lot with archeology because of the rich heritage in Colorado with Indian artifacts, and its just interesting history in B-L-M. Even though it was a young agency, the public-land ranching goes back to when the West was settled. And you got to work much more directly with the constituents because they weren't represented by groups. You had individual allotments instead of irrigation districts. It was really a lot of fun. I would have stayed. I could have stayed, except you still had to work with Interior, and Interior was the same no matter whether you were the state director for B-L-M or a senior manager for Reclamation. It was very much the same relationship, and I was tired of it. I was tired of top-down directives. I was tired of the pettiness that can happen with government. It

wasn't as satisfying as I thought it was going to be, although it was a very fun time to be there.

When I showed up, the first order of business was to implement Secretary [Bruce] Babbitt's range reform, and they wanted Colorado to be the pilot state for the exemplary values that come out of range reform, and we did. We took the point on it, and we delivered range reform for Babbitt in Colorado. It was interesting, but not interesting enough to keep me from retiring a year and a half later.

Storey: At, what, forty-eight, forty-nine?

Glaser: Forty-nine. Yes, it was not a really smart financial move, but it was the right thing for me to do. I have zero dissatisfaction with my federal career. I had a wonderful federal career. I could not have thought of doing anything different for twenty-five years. I was afforded incredible opportunities beyond my wildest imagination as a young person, that I would be able to do the things that I was allowed to do in the name of public interest. It was a great time. It was a great ride.

Storey: I have a question I want to ask you, and I don't want you to take it wrong, is my problem.

Glaser: No, that's okay. Go ahead.

Storey: But what was it in you that gave you all of those opportunities? What was it that people liked and picked up on, and why was it that you got moved up?

Not a Conventional Reclamation Career Manager

Glaser: That's probably a better question to ask somebody else, but I'll take a stab at that, because I'm not your conventional Reclamation career manager.

Storey: No, you're not, and I want to talk about some of those other things, too.

Glaser: Yes. My degree is in business administration and economics.

Storey: Instead of an engineer.

Glaser: Instead of engineering or planning. The careers that led to the top were engineering and planning disciplines in Reclamation. So, when I went to work for Reclamation, my intention was to work in administration for as long as I worked for Reclamation, and I did do some of that. My career started with I-R-S [Internal Revenue Service] as a summer job, but when I went to Reclamation, I came in on a rotational program, and I chose to work in personnel, because I liked the human aspect of the organization. I like human dynamics. I like to work with people and figure out what makes people work, what makes them function at their highest level, what makes organizational units function at their higher level. I was really interested in institutional dynamics. Personnel, to me, was not subsidiary to the functioning of the organization; it *was* the functioning of the organization.

So I got very captured by what made the relationships between different levels, operating

levels of the organization, how the different units within the organization interfaced or did not, why they did not. I was very taken by that. I'm an observer. I think I have pretty good observation skills; that I tune into things pretty well; that I have pretty good intuition and instinct. So I became very interested in the dynamics of Reclamation, and I spent, I don't know, six years in personnel, maybe. I started as just a Grade 5 and, in four years, was a personnel officer in a region.

And why did I advance so quickly? Because that's astronomical advancement, to go from a Grade 5 to a division chief in a region just as quickly as you could get there. A lot of it was dumb luck. I mean, opportunity has to present itself or the best of people can't move forward. There's only so much room in an organization. I came in at the most opportune time. I came into Reclamation in the early seventies, and it was at a time that all the people who came in after the war were retiring. So you had a whole complement of Reclamation staff going out the door in a five-year period of time, and just everybody left that came after the war. By 1980 they had their thirty-five years in, and so you had just vacancy after vacancy after vacancy.

Reclamation was Changing

It was also at a time that Reclamation was changing incredibly. Jimmy Carter was elected president two years after I came to work for Reclamation. So not only did you have people leaving, but you had new values being introduced from the leadership of Reclamation. Dan Beard was the deputy assistant secretary. Guy Martin was the assistant secretary. Cecil Andrus was the secretary. They all held different values. Dan Beard, as the deputy assistant secretary, had a great deal of influence over Reclamation at that time. Outside forces, Dave Wyman [phonetic], who's a good friend of mine, a lobbyist in Washington, had a great deal of influence over the Carter administration and the introduction of the "hit list."

If you remember the nature of the "hit list," the issues they were going after now were economic. The projects were challenged as economically unviable. It was an environmental challenge, but the environmental challenge was conducted on economic terms, and Reclamation wasn't really ready to deal with that. It was a great time to watch the dynamic in Reclamation, to watch things like denial. I mean, the most common thing that I heard as a young person in Reclamation—and I had no vested interest, so I just observed—was people saying, first, that Reclamation was an organization unlike all other governmental institutions in that they carry their own weight monetarily, all investments were repaid, and that was unlike all other government programs, and it was an area of immense pride for Reclamation.

The second thing that I observed was a hopefulness for the future, a denial that things were going to change, and a statement that, "Well, just wait for the next big flood or the next big drought, and they'll come to their senses." So it was an expectant waiting period. For me, though, because I was not heavily invested in, at that time, the Reclamation tradition as a new employee, it was just interesting to watch. You'd get caught up in the emotions like everybody else. I'd hear the rhetoric enough times that I would hear myself saying, "We repay everything we invest, the users do," and being very proud about that when I'd talk to my peers. I could feel myself having animosity towards the Fish and Wildlife Service like existed at the time, but not to the extent that my compatriots did in the organization.

So I came out of that period not as captured as most by the Reclamation tradition. So when we started to do a more honest introspection—because we were forced to do that. I mean, our projects went on the "hit list," all of them. All of our new projects were challenged as non-economic, and in the Upper Missouri Region, where I was, we led the list. I mean, we had Garrison and Oahe, and they were the biggies. They were *the* big projects in Reclamation at the time. The Garrison Diversion Unit and the Oahe Project, they were the Central Arizona Projects of the early seventies. They were *the* big projects, and both of them went on the block. So, late in the seventies—this is a long answer to a very complicated question.

Storey: This is fine. This is what I want to hear.

Glaser: Late in the seventies, Garrison really started to struggle. Oahe just fell on its knees, fell over, and died, and that was because there was not support for it in the state. That's what happened to Oahe. There was not a consensus in the state. They actually had a vote, and Oahe went down. So we just packed our bags, sulked, and left the state, closed the office.

But the second thing, Garrison was different, because there was absolutely unified support in North Dakota for Garrison. The delegation, the governor's office, it didn't matter, Republicans and Democrats alike, everybody supported the project, and it had overwhelming support within the population of the state, just overwhelming support. It didn't fall over so easy, because there was political will behind it. So it resulted in a blue-ribbon commission early in the [Ronald] Reagan era, but they were looking for a different sort of person in the Region to shepherd that blue-ribbon commission.

Now its getting into the early eighties, its like '82 or '83, and they tapped me, because, by that time, I'd spent seven or eight years in the Region. I had a lot of energy, a lot of enthusiasm for what was going on, and some aptitude, apparently, and they tapped me to go work on this, to be the regional point with this blue-ribbon task force on Garrison. Over the next few years, I became quite an expert on the Garrison Diversion Unit. I knew more about the Garrison, had a broader knowledge of the Garrison than probably anyone in Reclamation at the time. More people had narrow, vertical knowledge, but they didn't have as broad a knowledge of the politics, the social need, the social interest, the economics, the biology, the international implications. As controversial as it was, I kept it from being controversial within our own organization.

Called on to Fix Problems

So I became sort of tapped as a person who could go into very controversial places and work on things without letting them spin out of control. So I became sort of a traveling fix-it guy, and that's why I worked on all these odd things that I worked on. So what gave me the ability to do that, which was the basic question in the beginning. A lot of it was background. For a guy who kind of came out of the wrong side of the organization, I have a very substantial knowledge of Reclamation law, Reclamation's history, the politics, the sociology of the issue. I believe first and foremost in my obligation to serve the American public.

My calling was not—this is going to sound bad; I don't mean this the way it sounds, either,

but I don't know how else to say it—my calling to public service was not to perpetuate the interests of the Bureau of Reclamation; my calling to public service was the perpetuate the interest of the public through my duties and responsibilities with Reclamation. There were times that I departed with my peers and I said, "No, we must change. We must change if we're going to serve the public in the future." And my peers were saying, "No, we love what the institution was, and we want to defend that and perpetuate that." That caused me difficulties within the organization from time to time. Some of my peers did not like me very much, because I would challenge what the institution stood for, not publicly, but in our own peer community.

I never challenged the merit of what we did as an institution. I love what Reclamation did. I love to go to the monuments that we created in the name of society. I love to see the green, pastoral nature of the areas that we created. I understand the economies that are dependent upon the structures that we built. I look at all of that, and I say, "Isn't that wonderful. Isn't that wonderful, and shouldn't we be proud?" But I looked to the future and said, "The future's needs are different than the needs of this nation fifty or a hundred years ago, and if Reclamation is going to be an institutional power, an institution of standing, we need to not only appreciate our accomplishments of the past, we also need to focus on what the new accomplishments of the future are going to be."

Now, a lot of people thought I shared Dan Beard's vision of the future. I didn't. I had my own vision of the future. I wasn't commissioner, so I was not in a position to institute directly, nor would it have been appropriate for me to institute directly what my vision for Reclamation was, but I certainly, every day, tried to influence Beard's behavior or Dennis Underwood's behavior towards what I believed was right and good for the American public in the institution that I served. It was fun. It was interesting.

Storey: And what was it that you believed was right and good, and how did it differ from Mr. Underwood and Mr. Beard?

Glaser: I work very closely with both Dennis Underwood and Dan Beard, and I like and respect them immensely.

Storey: I believe Dennis brought you to Washington.

Glaser: Yes. I actually came into Washington on a temporary assignment when [Dale] Duvall was there. The P-M-C brought me in when [William] Klostermeyer left, because Duvall didn't really know me that well, but the members of the P-M-C did. But I went in temporarily. I had no intention of moving to Washington, told them I would not move. I was assistant regional director in Billings, and my family was from Billings. My family lived in Billings. My wife's family lived in Billings. We wanted to stay in Billings. Eventually I would have left that position to go do something different in the private sector, but my interest was not in Washington.

Went to Washington on a Temporary Basis, "Then They Just Left Me There"

So they took me in on a temporary basis, and then they just left me there. After eleven

months of being temporarily assigned to Washington, I gave in and allowed myself to be reassigned, but by that time Dennis had come on board, and he'd been there for maybe three or four months. So by that time he and I had developed a pretty good relationship.

It was a hard time for Washington, because that was 1989. That was the year after they'd moved everyone out of Washington. So you had this disillusioned remnant crew in Washington with no sense of purpose, no sense of direction. They were a collection of staff that was left over with a collection of the most ugly, atrocious materials and equipment, because anything that was good and useful left. I mean, it was a sad place to work in 1988 and 1989. Klostermeyer's energy, gone, left a big void, and Bill was an incredible guy. I mean, you had people in the past back there like Don Anderson and Cliff Barrett²⁷ and Bill Klostermeyer. I mean, these were the institutions. They followed on the heels of the [Floyd] Dominys. All of a sudden, with Bill leaving, there were no institutional giants back there.

It was a hard time, and they were disillusioned and kind of upset, and I didn't think it was a place I wanted to work very bad. But they convinced me to stay, and I stayed through Dennis and actually was reassigned out here before Dennis left, not by choice reassigned out here.

Dennis's vision for Reclamation was an engineer's vision. His was one where, when he looked at what we built, he saw the engineer's utility of it. Dennis gave a speech commonly that talked about the reuse of water and being able to reuse water six and seven times through a system to benefit society. So what his vision for Reclamation was the incredible utility of what we built.

Dan Beard's Vision

Dan came along, and Dan's vision for Reclamation was a changed agency. I don't think Dennis really viewed this thing, the Bureau of Reclamation's 6,821 employees as something to—he didn't have a vision, I think, for the institution. He had a vision for the utility of what the institution produced. Although Dennis did an awful lot for the human resource side of Reclamation also. Dennis was very compassionate towards employees and wanted to do right by the work force, and I don't mean to imply that he didn't care about the institution. He cared very much about it.

Dan came in, and his vision wasn't about the utility of the things that we built; his vision was about this thing, the Bureau of Reclamation, the collective sixty-some-hundred employees, and where this energy should be placed. I'm not certain that he didn't have more vision about where it shouldn't be than where it should be. I hate to talk about other people, but I noted when Dan came out to talk to the people here at the Engineering and Research Center, and we were out on the east side of the building on the mezzanine, and he said his vision for Reclamation was to be the premier water resource management agency in the

²⁷ Clifford I. Barrett began his career with Reclamation in 1956 as an engineer in the Office of Design and Construction, became director of the Upper Colorado Region in 1981, and briefly served as acting commissioner before the confirmation of Dale Duvall. Mr. Barrett also participated in Reclamation's oral history program, see Clifford I. Barrett, *Oral History Interviews*, Transcript of tape-recorded Bureau of Reclamation Oral History Interviews conducted by Brit Allan Storey, senior historian, Bureau of Reclamation, in 1996, in Salt Lake City, Utah, edited by Brit Allan Storey, 2009, www.usbr.gov/history/oralhist.pdf.

world, pretty close verbatim to what he would have said.

Storey: The was exactly what he said, I believe.

Glaser: He talked about that a little bit, and then he opened it up to questions. A hand went up, and the first question was: "Well, Mr. Beard, what do you envision the premier water resource agency to be? What are we going to do?"

His answer was, as I recall, "That's not for me to decide. That's for you to decide." And that was a very telling statement to me. I liked it, see? I didn't mind at all that Dan wanted us to define what Reclamation should be as the premier water resource agency in the world. I was just as happy that he did not try to define that, but, in part, it was because he came off the Hill. He was a Hill staffer. What did he know about what 6,833 people did for a living? I think it was a great deal of wisdom that he did not try to define that for the organization. The organization never captured the opportunity he presented, though.

So how did I differ from Dennis or Dan? I think I agreed with Dan that our focus in the future was to be a great water resource management agency. It was the culmination of all things we had done for ninety years. But, unlike Dan, I had a greater opinion of how we should manifest that, what that really meant, and I tried to sell that for nearly ten years, from '85 to '94 when I left. I tried to sell this vision long before they came. And the vision only somewhat stuck. But I'll come back to that. I wasn't frustrated by that, by the way. I was initially, but not in the end.

What I believed and what I believed in my heart and in my soul was for ninety years Reclamation built incredible structures that had potential to do marvelous things, marvelous things. And then we would leave the decision about the marvelous potential to some other entity, and we would go off to build the next new thing that had marvelous potential. But we paid very little attention, over ninety years, to what was the full capability, the full potentiality of these things that we created. We didn't get captured by being involved in maximizing the potential of the institutions that we built. We just got captured in building the next one. I mean, its what we love to do.

Vision for the Future

My vision for the future was to sort of double back on ourselves and say, "Okay. Okay. We're not going to build very many more of these in the future. Let's not be disillusioned. Let's take this as an opportunity now to go back and revisit what is the full potential of the thing that we created for the people of this country." That's why this "water resource management agency of the world" thing . . .

END OF SIDE 1, TAPE 1. FEBRUARY 6, 1998.

BEGINNING OF SIDE 2, TAPE 1. FEBRUARY 6, 1998.

Glaser: I believed its where we really needed to be for the time, and I was hoping that we could start doing it before somebody tried directing us to do it, that we would have done that of our own volition, that we would have seen the potential of that. But the interesting thing about the

institution was, and there were several times that I misread—just misread—Reclamation, much as I tried to pay attention to it and be in tuned to it, and this was one.

I thought people would get excited about that, but the main core of Reclamation did not, because they could not envision a Reclamation that did not evolve around building new great things. They just couldn't envision the institution, and there was no way to help them see that. That made me sad, because we let a window of opportunity go by. If we would have taken this on in our own course in the early eighties, we would have had tremendous momentum for Reclamation to emerge to something much more powerful than they'd ever been. Because people wanted us to change then, because they didn't like what we were doing. And we could have used all the energy that they expended to stop us as energy to propel us in a new direction. But because we didn't, we kept fighting the same trend. We let all this energy that was sitting out there, social energy, expend stopping us, and there was no energy to redirect into the future. So we had spent fifteen years building our own new source of energy. That's why Reclamation, in my view, went so flat.

Controversy in an organization is not necessarily bad, because its energy. Apathy is what kills an organization. That's why, when things were changing here, it didn't bother me so much that there was a lot of anger. It didn't bother me that there was concern. What bothered me is if we ever saw apathy. Because you can direct anger, you can direct concern into very constructive directions. You're angry at me? All I have to do is say, "Okay, then, Brit, what are we going to do to satisfy your concern?" It redirects your energy into some healthy direction. If you're sitting there and you go, "I don't care," there's no energy to redirect. It was exactly the same for the institution.

We fought the public so long that we came to a halt. And then they went off to do something else, and we were stopped, and we've been trying to build up momentum for twelve years. Whereas if we would have used all this energy to stop us to redirect us, we'd have had everyone right on board with us, and they would have propelled us along. We'd have gotten legislation we needed. We would have gotten support we needed. It's really too bad that that happened. I saw that at the time. I just didn't know what to do about it. I talked a lot about it until people got tired of hearing it.

Ending the Era of Engineering and Construction

But I guess, to answer your first question, it was sort of all of these attitudes. It was all of these odd behaviors that people saw that they wanted to use. Dennis Underwood sent me to Denver. I didn't want to come to Denver. I wanted to go back to Billings at the time the R-D's [regional director] job was vacant in Billings, and I had no desire to work in the Denver Office. It's not that I had any dislike for the Denver Office; it was just not a climate where I wanted to work. I wanted to go back to where we had resources. We had dams and water and contracts and constituents and things that you could go out and do every day, real problems to solve that had to do with the resource. If you came to Denver, you were going to have real problems to solve, but they didn't have anything to do directly with the resource. They had everything to do with the human resource. So I wanted to go to Billings, and they said, "No, you have to go to Denver, because Denver needs some kind of new energy."

So when I was sent here, my job was to help the Denver Office leave the era of engineering and construction and position itself for the era of resource management. That's why I was sent here. I think we did that pretty well. Dan's goal, in part, was to strip the capability of Reclamation to construct things in the future. And I never subscribed to that goal, and I wouldn't let that happen, not because I think we're going to construct a lot of things in the future. My concern was for the 370 or 80 high structures we had in the West, we needed to have as proficient or more proficient of engineering capability than we'd ever had in the past. Its one thing to build them. Its another thing to protect the integrity of the structure in perpetuity, because as long as there's water behind them, our single highest calling as an agency was to protect the human health and safety associated with the integrity of the structure, highest calling above all others. To do that, we needed to have the highest caliber of engineering and science capability.

Dan and I wrestled with that all the time—fought, if you want to use that word. We just disagreed. His argument was if we keep that capability, then at any time Reclamation can be redirected into a construction mode. My reaction was, so what? The bottom line is we needed to keep the capability because it's the responsible thing to do. And that's why we kept a very strong Technical Service Center here. There were people advocated doing away with technical services and going to A&E contracts. I thought that would have been the worst thing that we could have ever done. So that's why you see a large, strong Technical Service Center, and that's why you saw people empowered, like Larry VonThun, to put together people and processes to protect the integrity of the structures, the integrity of our design process. Because I'll be darned if I was going to be part of the next inquiry into the next dam failure because we didn't have good design processes, like we did when they investigated the failure of Teton [Dam].²⁸

It was a hard time. I didn't like working here very much, not because I didn't like the people. I loved the people. It was a hard place to work because it was a hard time to be here, because the organization itself couldn't understand that. They just felt under attack. But I think, for the most part, we used that energy constructively. I think this is a very healthy organization that can be very successful in the future if only the institution can figure out what the future is all about. That's where we're at today, as I see it.

Storey: So many questions. One of them is, you were talking about—

Glaser: Well, keep in mind, because I have an opinion doesn't make me right. This is the world as I view it.

Storey: I don't know if you ever understood how fascinated I was with you as a manager. Because you intellectualize things in a completely different way than any other manager in Reclamation, I think. I like that, because I like people who think about that kind of stuff. So I was really quite fascinated about it. But one of the things I'm interested in; you were talking about evolving Reclamation and understanding the capabilities of the projects we've built. What do you think some of the areas of interest there would have been?

²⁸ Teton Dam was a Reclamation facility in southeastern Idaho that collapsed in June 1976, causing over 1 billion dollars in property damage and eleven casualties.

"Diversity of Thought"

Glaser: I'll answer that question, but I want to talk about looking at things differently, because I think I do look at things differently. But I don't want to talk about that. What I want to talk about is one of the needs that existed in Reclamation and exists yet today, that at least I tried to talk about and tried to do something about, and that was diversity of thought, diversity of thinking. I celebrated diversity of thought.

We had Phil Doe in P-A-O, [Policy and Administration Office] and for eight years people tried to pin Phil into a box where he could do the least harm as they saw it and somehow saw him as not being a valuable resource, just something they had to contend with every day. Well, when I took over P-A-O, Phil became one of my most interesting resources, because Phil would say things other people wouldn't say. They may think it, but they wouldn't say it, and I appreciated his diversity of thinking. Now, I didn't agree with him most of the time, but I'll tell you what, he challenged and tempered my thinking, and institutions need to be open to that.

The reason I bring it up is, in the mid-seventies, Reclamation was a homogenous organization. They were constituted of like-thinking people. Everybody thought exactly the same way. For the most part, they came from the same background. They grew up in North and South Dakota or the central valley of Utah, Kansas, Nebraska; they went to South Dakota State; they went to U-N-D [University of North Dakota], they went to Utah, Nebraska to get engineering degrees to go to work for Reclamation to perpetuate the institution. And they were of a like mind. Even if we hired somebody from Michigan, then we groomed them into a U-N-D thinker, and there wasn't very much diversity of thought.

When the environmental movement came along and they passed NEPA and E-S-A [Endangered Species Act] and the Clean Water Act and the Fish and Wildlife Coordination Act, and it culminated for us with the challenge of our projects with the "hit list." Because we were of one mind, as an institution we were unable to assimilate this new public thinking, and so we rejected it. That became our initial failing. So I guess I would not allow that to happen in the institution. I would take up a cause sometimes because somebody just had to talk about a different perspective. Otherwise, we'd all sit around the table, go, "Uh-huh, uh-huh, that's right, that's right." Somebody had to raise their hand and say, "Well, wait a minute. There's another way to look at this, and here's what this group's thinking."

So I don't know if that was intellectualizing it, but it was trying to look at the issue in all of its social complexity instead of how we looked at issues historically, and that was from a homogenous position, both intellectually and socially.

In fact, I tried to breed in Reclamation a whole new generation of different-thinking people. People who just looked at things differently. Not that to look at them differently was right, but to look at them differently counterbalanced everybody who looked at it the same way. I never thought that I had all the answers. I didn't even think all my answers were the right answers, but they had to be on the table. Otherwise, we would never get around to an honest discussion, and we owed that to the public. So that's what motivated me as much as anything. There were different values in society that were not represented.

Okay. Now, I think your question that you asked me was about division for the potential of what we had built. Is that where you were asking me?

Storey: You were talking about finding out what our resources could be at their fullest potential. What were some of the areas you were thinking of there?

Reclamation Resources Reaching Their Fullest Potential

Glaser: Initially, Reclamation projects were built as single-purpose projects, and they were built to provide storage for agriculture. That was the authorized purpose for all of our initial projects. The full potential of the project was focused in that direction as a matter of law. But you know as these things just sat there, irrespective of what Congress said about them, other benefits started to be derived. They were just opportunities naturally evolving. They were like flat-water recreation. All of a sudden people started to love to look at this placid water, and then they thought, "Jeez, you know, what a nice place to fish," see, because we didn't have a lot of natural lakes in the West like they have in the East. So we didn't have a lot of real natural flat-water fisheries in the West, but it was part of the culture of the people at the time. So they saw the potential for it. They stocked fish in it. They became great fisheries. As the boating industry matured, then they got into all of the boating aspects of lakes—sailing, speedboating, down to these new water whatever they're called.

Storey: Ski-do things. I've forgotten the name of them, too.

Glaser: Yes, wave-runners, into parasailing. All of these are new phenomena that occurred because the potential existed. You take that downstream. A lot of warm water fisheries in the West, and they weren't sport fisheries, and we built reservoirs, and, lo and behold, it created the opportunity for cold-water fisheries that became world-class fisheries. Those things emerged, and people could build cabins in proximity to the lakes, enjoy just the basic beauty of reservoirs.

We had cities grow up, and municipal water became a much greater part of the benefit that was derived from reservoirs, because now we had sustained water supplies. And we had the ability to produce power, which was only a residual benefit in 1910, which became a dominant benefit in 1930s with the construction of Hoover and Coulee. That was Ickes's vision for Reclamation.

Storey: Harold Ickes²⁹.

Glaser: It wasn't irrigation; it was power. He would have given Reclamation to [U.S. Department of] Agriculture had it not been for Hoover Dam and his vision for what the future held as an electrified West. Reclamation didn't fall quickly to any of these new visions. They didn't pick up on the potential of power instantaneously, although they saw the potential for getting large projects authorized. They didn't pick up the potential of recreation. Even in the seventies, recreation wasn't a big deal to Reclamation. They were still trying to give away every recreation site they could to some local interest to manage for some little local activity.

²⁹ From 1933 to 1945, Harold Ickes was secretary of the interior under the administration of President Franklin D. Roosevelt.

Reclamation had never seen such division of the potential of their projects, because of their culture, providing irrigation water, and their interest, building new things. But as you're entering the next millennium—and we are in the most urbanized area of the country—the West is the most urbanized area of the country. More people in the West live in cities, a portion of their population, than anywhere else in the nation. Then you have to look at these structures to serve interests other than irrigated agriculture, and they're doing that as a matter of happenstance. But because they're not planned and because they're not thoughtful, we're only somewhat realizing the potential in any one of those areas. We're only somewhat realizing the recreational potential of our projects—period—because we leave it to the private sector to develop our resources, and they only develop those that have the greatest financial potential. They don't develop the ones that have the most public or social potential, and we don't plan well for that.

Just look at the size of our recreational staff. For an institution that has however many million visitor days we have a year, 90 million visitor days, we have no recreational staff to speak of, and the people that we have fight upstream to have their program considered.

We look at Indian issues as a nuisance—as a nuisance—as opposed to a social potential. We're just now starting to think in proactive Indian terms. But this issue's been on our doorstep since the Winters Doctrine, since the *Winters* case in 1913 and as a real social issue since Wounded Knee in the seventies. And for twenty-five years, as an agency, we rejected, then we resisted, then we reluctantly complied, and we're only now starting to think proactively about that.

There is tremendous opportunity for Reclamation projects to benefit Native American communities. But if we approach it from the perspective that the only way we will address that is if we can build new storage so that we don't inconvenience ourselves or any of our historic constituents by looking at existing projects, we're only going to satisfy the most minuscule part of the Indian need. I'll tell you, eventually we will be drug to a different place. I say why be drug to a different place? Why don't we march to the right place through good public processes and good public thinking, and why don't we be a leader instead of a reluctant follower?

You can go down through aquatic habitats. We allow ourselves to be co-opted or pulled into processes, but very seldom do we lead the process. We were an institutional leader in construction. We're not an institutional leader in resolution of the problems that we face today. We're a significant player, but we're not a leader in anybody's book, and until we step up and become the leaders of the future, then we will always be viewed as the reluctant partners. To me, that was very sad.

"To Lead is a Very Risky Place"

Now, to lead is a very risky place. It's a hard place to be, out front. I mean, look at the

types of people that we had in the past that led Reclamation. Look at Floyd Dominy.³⁰ Floyd Dominy was not without his controversy. Look at Teddy Roosevelt. Look at the people who moved the conservation movement, like [Gifford] Pinchot and [Francis] Newlands. These folks were not without their controversy. They did not aspire to the levels they were at without taking risks, and history treats them with a checkered review. If we want to be the leaders of the future, we need to be willing to take those same risks today and subject ourselves to the same kind of criticisms they faced, and know that we're doing the right thing, in our heart, for the American public. When we aspire to that place, we will be everything we can be. We're not there today. We don't have the emotional energy for it. People will tell you, "Well, that's because the administration," whoever that is. It's not just this administration, because they would say the same thing about the George Bush administration. People would say, "Well, we don't have that kind of leadership coming out of the administration."

I'd say, did that ever stop Floyd Dominy? There's nothing wrong with us helping the administration find the right course. What do they know? They come in here, they stay for three years. That's what Dan Beard was saying. I don't know if it was what he was saying. That was the opportunity I saw in what he said. He left it to us to define our own future, and we weren't ready to do it, which is too bad. It's part of the reason I left. I spent twenty-some years struggling to that moment in time when we, as an institution, were going to be able to define our own future, and it was presented to us, and we couldn't do it.

Storey: Talk to me, then, about the changes that did happen. You don't believe they were major changes?

Glaser: The institution has changed so much in twenty-five years, it's incredible that it held together at the seams. Of course it changed. I mean, Reclamation today is fundamentally different, fundamentally different, than the Reclamation I joined in 1973. Not better; not worse. I can't put a judgment on it like that because those are too value-laden. But it is truly fundamentally different. What are the changes that I've seen? Go back to what we were. We were homogenous, institutionally homogenous. We were run by a certain class of citizens. We were made up of a certain class of citizens who believed in a singular ethic and a singular vision for the future. We were construction oriented.

Creating WAPA had the Greatest Impact on Reclamation

The most influential thing that happened to Reclamation, in my opinion, wasn't the "hit list" in the Carter administration. The "hit list," to me, distracted us. The thing that affected

³⁰ Floyd Dominy was commissioner of the Bureau of Reclamation from 1959 to 1969. See Floyd E. Dominy, *Oral History Interviews*, Transcript of tape-recorded Bureau of Reclamation Oral History Interviews conducted by Brit Allan Storey, senior historian, Bureau of Reclamation, April 6, 1994, and April 8, 1996, at Bellevue Farm in Boyce, Virginia, edited by Brit Allan Storey.

Reclamation the most, I think, since the '39 Act,³¹ since we went to a multi-purpose agency, was when they set up the Department of Energy and took the power marketing away from Reclamation.

Storey: In 1977.

Glaser: That's right. That is the most singular fundamental change to Reclamation since 1939, and the reason its more significant than cost-sharing, more significant than NEPA, more significant than E-S-A to us institutionally, because it did two things to us. One, the power program was a mainstay for us. All of the program that supports Western [Area Power Administration], the 1,200 employees at Western or 1,400 or whatever they have today, the twenty-some-hundred that they had a few years ago, all of the program that supported them was the foundation upon which Reclamation was built. That was the mainstay. When they took that out, the program that had to then carry Reclamation singularly was the construction program as a matter of appropriation. And the construction program never was—never was—a flat program. It had its great peaks and it had its significant valleys.

Look what happened during the [Dwight D.] Eisenhower administration when civil works wasn't real popular. We went through big RIFs [Reduction in Force] and got rid of all our planning staff and put half the economists in the nation out of business, but we sustained that because we had this incredible power program that carried us through that, tremendous capabilities, both financial and technical. And power marketing and rate setting was integral to financing Reclamation projects. They're an integral part of us.

When they were taken away, we lost our ability to deal with the financing aspects of projects, as well as our ability to maintain the institution through the ebbs and flows that we always faced. In addition to that, it fractured the constituency of Reclamation. Power users are not our constituency today; they're WAPA's constituency. And we find ourselves running up against the power users where they would have been our most powerful advocates in the past. Glen Canyon being an example. We, as an institution, were forced to reoperate Glen Canyon. Western got to advocate on behalf of the power users. Power users decried what we did, and what used to be a strong lobby force now is indifferent to us at best. That affected Reclamation fundamentally. So

So, Reclamation changed? Oh, yes. The work force, look at the diversity of the work force. Look how many sociologists. Look how many biologists. When I went to work in Billings, our environmental shop was made up of one person. We didn't have an archeologist.

Storey: Yes. Those all came in about '76 to '80, usually.

Glaser: The law was passed before that, but it took us four or five years to sort of mature to it. I

³¹ Reclamation Project Act of 1939 expanded the Bureau of Reclamation's mission in water resource development by allowing Reclamation to provide municipal and industrial water, along with flood control as project benefits; authorized the secretary of the interior to establish 40-year repayment contracts and utilize power revenues as part of feasibility studies to offset project costs; allowed for a 10-year project development period before water users began repayments. For more information, see "Reclamation Act of 1939," in United States Department of the Interior, Bureau of Reclamation, *Federal Reclamation and Related Laws*, Volume I of Three Volumes through 1942, Richard K. Pelz, editor (Washington, D.C.: United States Government Printing Office, 1972), 634-64.

mean, look at the disciplines that we've added. Look at the backgrounds of the people who now work for Reclamation. Look where they come from. Look at the diversity. Look at the positions held by women. Thinking back to when I came to work for Reclamation, the highest-ranking woman in the Regional Office in Billings was the head of Classification and Labor Relations, a Grade 13 female, highest-ranking woman. Now look where Margaret [W. Sibley]³² sits. Look where Mary Ann . . .

END OF SIDE 2, TAPE 1. FEBRUARY 6, 1998.

BEGINNING OF SIDE 1, TAPE 2. FEBRUARY 6, 1998.

Storey: This is an interview by Brit Storey with Donald R. Glaser on February 6, 1998.

Glaser: Your question was about how Reclamation has changed.

Storey: You were talking about the diversity.

Glaser: I was talking about how it missed the opportunity to become what it fully could be, and that led you to the question of, well, but, gee, hasn't it changed? And my point is, yes, its changed fundamentally, and the most fundamental change, to me, in the last fifty years was when they passed the Energy Act and set up the Western Area Power Administration under the Department of Energy.

Storey: Yes. I think we got all of that on tape.

Diversification in Reclamation

Glaser: Then we began to diversify. There's another fundamental change in the organization. We diversified in three ways. We diversified in the disciplines that we hire, that we have biologists and sociologists and archaeologists. I was noting that when I came to work in Billings, our environmental shop had one person in it, Eley Denson. We didn't have an archeologist. The only biologists that we employed were out—we didn't have any biologists. We hired a bunch in North Dakota to try to prove the project wasn't hurting the environment when it became a hot issue in the late seventies, but we didn't have any biologists besides Lee Denson on our payroll. Today you see those as a common, respected part of our organization. In fact, you even see some of those disciplines starting to end up in leadership roles, which is hard to believe. So, we diversified as a matter of discipline.

When I went to work in Reclamation, the highest-ranking woman in the Regional Office was a Grade 13 Head of Compensation and Labor Relations. And now we have women in very high-ranking positions, in male-dominated position in the past, as with Sandy Simons [phonetic] in Contract Repayment or Margaret in P-A-O. We've diversified ethnically. We've diversified as a matter of background. We don't just hire people from U-N-D anymore, University of North Dakota, Nebraska or Utah schools. We hire them from across the country. They come from other agencies. We never hired a person from another agency

³² Margaret W. Sibley was the assistant commissioner of human resources from 1992 to 1994. In 1994 Commissioner Beard eliminated all deputy and assistant commissioner positions. In their place Reclamation created a four director system.

in the past, even if it was the [U.S. Army] Corps [of Engineers]. I mean, we brought in our own, and we trained our own. So, just basic changes that have occurred because of the laws that have been passed that have driven us to work in different areas.

You look at the laws that passed through the late sixties and early seventies, they drove us into whole areas of social inspection that we never looked at before, just never gave any consideration to and wouldn't have had the laws not passed. So, no, I think Reclamation today is a fundamentally different organization, both culturally and programmatically, than it was in the 1970s. We haven't had a new construction start—I don't know. Maybe C-A-P [Central Arizona Project] was the last real new traditional construction start. Maybe Dolores was the last project that we completed that was traditional in nature.³³

Storey: With both of them authorized in 1968.

Glaser: That's right. Old authorizations. Animas [Animas-La Plata Project]. Look at all the controversy over trying to build Animas to serve an Indian settlement and how its been whittled and reshaped. Garrison, the same thing. Garrison has been reformulated once to take out most of the irrigation, and they're trying to reformulate it again to take out the rest of the irrigation, make it an M&I project. Our projects fundamentally changed. Look at the Weborrough Pipeline in South Dakota. It's a 120-million-dollar program, and Reclamation did nothing other than fund it. All the construction management was done by a private entity.

Storey: Which pipeline?

Glaser: Weborrough Pipeline. It was the first one. It was the first tradeoff for Oahe. Mni Wiconi was the same way, also in South Dakota, a 200-million-dollar program, and Reclamation does no design, no construction management, and a 200-million-dollar M&I program in North Dakota on the reformulated Garrison. We granted to North Dakota 200 million dollars, and they oversee the construction of the municipal water systems. So, Reclamation, in many ways, had moved away from construction management ten years ago into a financing institution, because we're now financing things.

Two things have happened. The knowledge in the private sector has come up immensely since 1910, and there resides in state government tremendous capabilities for managing civil works, as it does at the local level. You have very large utilities. Metropolitan Water District of L-A employs as many employees as Reclamation. So you can't say Metropolitan Water District doesn't have the capability to carry out a civil works program. They're building the largest reservoir in the West that's been built in the last ten or fifteen years right now. State of California employs more people than Reclamation in Water Resources. So the capability outside of the federal government has increased immensely in ninety or a hundred years, and so they don't need the capability that we brought to the West as our basic initial calling.

³³ For more information on the Central Arizona Project, see Jennifer E. Zuniga, "The Central Arizona Project," Denver: Bureau of Reclamation, 2000; located in the Dolores and San Juan river basins in southwestern Colorado, the Dolores Projects takes water from the Dolores River for irrigation, municipal and industrial use, recreation, fish and wildlife, and production of hydroelectric power; for more information, see Garrit Voggeser, "The Dolores Project," Denver: Bureau of Reclamation, 2001, www.usbr.gov/history/projhist.html.

Secondly, the federal government brings less money to the table. They spend less money in the West now on water resource development than the states, markedly less. And so just the whole position of Reclamation in the West has changed, not for the better or for the worse. We may wish for how it was, but it will never be how it was again, not because of somebody like Dan Beard. Everybody wants to find somebody to blame. This doesn't have anything to do with Jimmy Carter or Dan Beard or George Miller.³⁴ This has everything to do with a new West that is different than the West of even forty or fifty years ago, just the capabilities of governments in the West.

That's why I'm a tremendous advocate for devolution. There are just things that the states can do for themselves that they couldn't do fifty or a hundred years ago, and the closer government gets to the individuals, the more responsive government is to the individuals. Its sort of in-your-face government when you get to the county level. By the time you get to Washington, D.C., its nameless, faceless government. That's not a criticism. I don't mean that to sound like a criticism, only an observation. I think its an accurate observation.

There's a place for federal government, by the way. We wouldn't care about endangered species in many states if it wasn't for the Endangered Species Act. We wouldn't have the public involvement today in federal decisions if it wasn't for NEPA. Archeology wouldn't have its place if it wasn't for Antiquities Acts. So there's a place for setting national standards like we do under Clean Water, but maybe the federal government doesn't have to be the implementer in all instances today. Certainly we're not the repository of all wisdom and knowledge, which we once were.

Storey: Why? Why were we?

The West Has Evolved

Glaser: Because if you go back to the 1900s, the early 1900s when the Reclamation Act was passed, the West was an immature part of this country. It was the wilderness. It was still the frontier. Engineering was an emerging discipline, as was forestry. I mean, they were just coming into their own. We were right on the heels of the Industrial Revolution, and the West was unsettled frontier. They had no money, and they had no social capability. Its hard to picture what it must have been like then. That's why I love the photograph—the one thing Reclamation has done for society is we photographed the West. Our photographic archives are the best in the West. And its wonderful to go back through those old archived pictures and see, to remind ourselves of what the West was at the time.

Well, that's not the West of today. The West is very sophisticated. Denver is an intellectual center of the world, a communications center of the world, certainly of the United States. Los Angeles is the most populous area. California is the most populous state, has the highest economic contribution to the G-N-P of any state. It is not this rural frontier struggling. I mean, communications—the world is so small. The West was this outpost ninety years ago. There are no outposts in the world today, not with telecommunications, not with video

³⁴ George Miller, congressional representative for California's 7th District in Contra Costa County, chaired the House Committee on Natural Resources from 1991 to 1994, and was pivotal in passage of the Central Valley Project Improvement Act in 1992.

imagery, satellites, airplanes. The world is small, and the West is an integral part of it. Its different, and we have to acknowledge that as an institution. We're in a western institution. If we don't change with the area we serve, shame on us. We'll become irrelevant.

Storey: One of the problems that I'm interested in and I've been watching is that people in the New West tend to want to judge what has been done historically by Reclamation on the basis of today's standards.

Glaser: Yes.

Storey: How you see that issue, and how do you resolve it in your own mind, or do I need to ask more?

Glaser: No. I'm trying to figure out a way into this issue, because this is fundamental to many of the problems that we face today. I'm a westerner, and I lived on the edge of the largest city in Montana, Billings, population 90,000. But I wouldn't live in the city, because I was not an urbanite, and, to me, Billings was an urban center. So I'm very sympathetic to the nostalgia and the emotional attachment to the rural West. That's who I am. So I can be emotionally engaged on this struggle to maintain the nature and the culture of the West. The West is a different place. I've lived in the East. It isn't better. Its just I'm more acclimated to the West.

I worry. I look with sadness upon the loss of the nature and culture of the West that I know, and it bothers me to see the Front Range, to me, develop from Fort Collins to Pueblo. Its not hard for me to envision a day when we have a megatropolis that runs from Fort Collins to Pueblo, and it is much similar to what you see in Southern California today.

I lived in Orange County for a period of time, and it was in the fifties, and I was a young child, around ten, but its vivid to me, living in Orange County in the fifties, because it was the country. We lived in the country. I define that because we didn't have curbs and gutters, we didn't have streetlights, we didn't have subdivisions. All homes were custom-built on some plot of land. Everything around you was a truck farm, a citrus grove, dairy farms, chicken farms, and it was one of the most agriculturally productive areas in the nation. This is Orange County. That's why its called Orange County. It was so rural, in fact, that my father, who worked at the Long Beach Pike, he was the construction foreman at the Long Beach Pike, which was the big amusement park, along with Pacific Ocean Park, in Southern California. My father was offered a job to help build an amusement park in Anaheim, out in Orange County, and my father's vision was that nobody would come from L-A clear out to Orange County to go to an amusement park.

Storey: And it was called Disneyland.

Glaser: Yes. The developer's vision was they would come from all over the world. But it was so rural at that time, my father could not envision an amusement park succeeding in Orange County. This is in the fifties. I left in 1959, moved to Great Falls, Montana, and it was the first city I ever lived in, population 60,000. It took a while to adjust to city life in Montana. In the forty years since I left Orange County, it has gone from rural to suburban, to urban, to urban growth that made Orange County the highest economic area in the country, to crash, to

urban decline, to the beginning of rejuvenation, in a forty-year window. A forty-year window.

Impact of Population Growth on the West's Limited Resources

I see the same thing happening along the Front Range of Denver. I see Douglas County growing to El Paso County, and I don't feel good about that, but it is the New West, this thing they call the New West. How I feel about it will not stop it. I heard Governor [Michael O.] Leavitt from Utah talking a year ago at Colorado River Water Users, and he comes from St. George, I believe, and he was saying he left St. George, and when he left, it was population 5,800 people. They're going past 40,000 today. He's a young man, Governor Leavitt, in his forties. They're going past 40,000 today, projected to go to 200,000 people. That is the West that we live in. People are coming.

Now, my concern for the West is twofold. One is just the very nature of population growth. People are coming because they want to come to the sociology and the environment of the West. That's why they're coming. They like both the environmental setting—open space, clean rivers, recreational opportunities, quality of life. They like the sociology of the West, the small community friendliness, relative absence of crime, relative absence of congestion, relatively clean air. I mean, that's why they're coming. They're leaving L-A because of the smog and the urban decline and the congestion and just the press of humanity. They're leaving Chicago for the same reason. They're leaving much of the East for the same reason. That's why they come here.

Their very coming, we afford losing the very things they're coming for by their coming, and that is happening. The Front Range today is taking on all the characteristics of Southern California or any other urban center, and that's worrisome. But more problematic to me, unless you try to stop urban growth, you can't really deal with that. People will come. That's the nature of freedom that you get through democracy and the right to hold private property. More important to me is the fact that we're institutionally not prepared to deal with the change. Because change will demand changes in policy as it relates to natural resources, whether its zoning and planning at the county level or whether it is roads and highways at the state level, schools at the county level, or whether it is natural resource policy at the federal level, forestry use, public land use, or water.

The water is even more difficult than public land and forestry use, and that's because it's a shared responsibility. The responsibility to allocate water rests squarely with the states—period, the end. The federal government, in the allocation of water, only gets involved when there's an interstate issue and the Supreme Court referees the differences between the states and they compact or decree the right to use the water in streams. That's all pretty clear. We may not like what they do about the allocation of water from our righteous perspective, but it's really not our business at the federal level under current law. The problem is, they invited Reclamation to come out to the West and build all these dang reservoirs, which gives the federal government the responsibility for how those reservoirs are operated. So you've interjected a federal institution into the business of what is inherently state in nature, and there rests the conflict.

Western Water Policy Review

We're not ready, as a matter of social process or social thinking, to deal with the growth that's going to occur in the next twenty-five years. We're not ready, and I worry that we will not be ready. So how do I reconcile that in my mind? How do I deal with that? I quit my federal job and go work for this loser of an activity called the Western Water Policy Review. That was a loser walking through the door. It was not going to benefit me in any way, because it was going to be criticized no matter what it said. It was a national policy report on western water. How could it not be subject to intense criticism? I wasn't naive. I knew that going in. But I was also stuck with these principles that I was always espousing, and I thought how could I, in clear conscience, walk on the opportunity to help these people develop the best report they could develop, given that it's a commission made up of citizens. How could I walk on that opportunity and still think that I really cared about the future of the West?

So, I quit my federal job and went over and did that because I was compelled to do it. And when I'm done with that, then I will find some other forum to go around and try to help society keep their eye on the ball, and the ball is, the West is growing. We have incredible issues to deal with, and are we prepared to deal with them? Do I make much influence as an individual? I don't know. Not compared to the magnitude of the West and the issues they face, although I do think I'm as influential as most anyone out here today as a single individual. So, along with all of these opportunities I talked about earlier that people gave me, over time I began to feel a sense of obligation. I owed something back for all of the education that I was given at the expense of the American public. This is my payback time.

Storey: Tell me about how this job with the Western Water Policy Review came up.

Glaser: You mean how did I become aware of it and how did I end up in that position?

Storey: Yes, that's what I mean.

Glaser: Well, Larry MacDonnel was first executive director. Larry MacDonnel was the head of the C-U Law Center, and he had quit the C-U Law Center and took this job as executive director to the Western Water Policy Review Commission. And he did that for nine months or so, sort of laid out a study plan. But I think what Larry found is this wasn't his cup of tea, that he was not equipped to deal with the conflicts within citizen groups and to put up with the nature of advisory commissions. It just wasn't something he liked, so he quit.

Larry's a friend of mine, and he called me when I was over at B-L-M [Bureau of Land Management] to talk about something else. He wanted me to be a speaker at the Colorado Riparian Association annual meeting, which he's a party to, and participate in something that they were working on. I asked him how the commission was going, and he told me he'd quit. At that point, I said, "Well, what are they doing to replace you?"

He said, "They're having a hard time."

So I hung up. I thought about it for a little bit and called him back a little later, and said, "Larry, what do you think their interest in me would be?" And he was flabbergasted that I would quit this really comfortable, prestigious, relatively high-paying, secure federal job to go work on an advisory commission for a year and change in the environment that he had

experienced. So we talked about it for a little bit, and I called up the chair and said, "I'm interested in doing this. Are you interested in talking?" gave them an application, and they hired me.

I was counseled by everybody, including the secretary. Secretary Babbitt personally called me and said, "Please, Don, you've made a lot of unusual decisions in your life." He says, "This is the dumbest decision you've ever made." He said, "Don't you know this thing's a loser?"

So I told him my rationale for leaving was very much what I told you. He wished me well. He still thought it was a stupid decision. Then there were days I thought it was a pretty dumb decision, but I have no regrets. I don't look back and say, "Gee, I wish I would have taken a different course." Its not that I don't miss B-L-M. I miss B-L-M immensely. I miss the employees; I miss the issues; I miss the constituency. I miss Reclamation; I miss the issues; I miss the employees; I miss the camaraderie; I miss the mission and what it can be.

Storey: Let's go back to what we were talking about before, the New West and how that changes things and explore that a little.

Glaser: I don't like the "New West" as a term, by the way.

Storey: What do you like?

Glaser: Its just "the West" to me.

Storey: Well, the West as it is now.

Glaser: This emerging West.

Storey: As it looks back on Reclamation and says, "Look at all these terrible mistakes that were made."

Glaser: I don't think the West says that, though.

Storey: You don't?

Half the People in the West Have Not Heard of Reclamation

Glaser: No. No, I don't think so. I think 50 percent of the people in the West have never heard of the Bureau of Reclamation. So if you're talking about the people of the West, the majority of them, I'd say more than 50 percent, have never heard of the institution. I would say 90 percent of all the people that live in Southern California have never heard of the Bureau of Reclamation, even though they get their water and energy, to some extent, out of Reclamation projects. To tell you the truth, I lived on Huntley Project in Billings. Our school was Huntley Project High School. I'd never heard of the Bureau of Reclamation until a friend of mine called up and said they had a vacancy there, and I was an adult working for the federal government, and Reclamation was the largest employer in Billings. So, most folks don't have

a view or an attitude about Reclamation one way or the other.

I would also believe—and this is unsubstantiated, this is just based on twenty-five years of talking to thousands and thousands and thousands and thousands of people about Reclamation's program—I probably for ten years was the person most on the point of giving speeches and talking to groups, the more controversial, the more I ended up there, about Reclamation's program. I believe the majority of people who are aware of Reclamation's program feel more positively about what Reclamation did than negative. I'd say the majority of the people who know the Reclamation program think that what was done was great and good, and attribute much of the West and the ability of the West to compete in the world to the presence of those Reclamation facilities—period.

I think there is a small minority who are intelligent and articulate and often outspoken who openly criticize, and, I think, unfairly criticize, the effect of Reclamation projects. So I don't think there is this basic attitude in the West that what Reclamation did is wrong. I think you can read nothing into the fact that they think there are enough reservoirs, for the most part. That doesn't mean that they think the ones we have are wrong. It just maybe means we have enough developed water as a general rule. Now what we need to do is manage our developed water differently.

I think there is a growing affinity in the West to rivers that have water in them. I think people, the general population, much as you remember my saying how they loved the placid nature of lakes and reservoirs and there's an aesthetic value to them. There's an aesthetic value to water in rivers, and I think people, for the most part, do not like to see dry streams in the West. They don't like to see dying riparians in the West where the rivers dry up and the cotton willow forest associated with them disappear like they did with the Gila [River] in Santa Cruz. People do not like that. To the extent that Reclamation projects contribute to that, then there is this sort of negative view or value. But as far as people generally thinking that the reservoirs we build are bad, I would think just the opposite. They would generally think the reservoirs we built are good, and that would be the majority of the population.

It doesn't mean we don't have to deal with ideas like draining Lake Powell, which you might think is a New West idea. I just think it is a socially extreme idea.

END OF SIDE 1, TAPE 2. FEBRUARY 6, 1998.

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The Distinction Between Interest Groups Have Blurred

Glaser: I don't see that attitude towards draining Lake Powell reflecting any mainstream value. I think that's an issue that fractures even the environmental community. By the way, at one time there was a pretty well-defined environmental community. Another thing that's happening in the West and across the nation is the lines are blurring between the distinction of groups. For instance, would have thought that at one time a fly fisherman and a river rafter would have been considered part of the environmental community. They would probably belong to the Sierra Club or Nature Conservancy or Audubon, and we would view those as sort of environmental interests, or they would belong to what were groups viewed as environmental

interest. But what we've found is there no homogeny between fishermen and rafters, that actually fishermen more align with power users and rafters may more align with water users. Because the fishermen, they want regulated flow in the river that creates as good a fishing habitat and fish-rearing habitat as possible, and rafters, they want high peak flows for rafting experience, and they're not conducive one to the other. That's where this big flap on the Arkansas [River] came from between the rafting and the fishing interests about six or seven years ago that turned into big articles in the paper about *Row v. Wade*, and they just were duking it out over how the Arkansas water shouldn't be moved down to Pueblo. So, there is no homogeny of interest even on that side anymore. So, I think there is no common view that what Reclamation did is bad. We just let ourselves believe that.

Now, one thing that does happen that leads to this, and I experienced this with the commission report. When you start looking at water issues and you try to describe where we're at today as it relates to water, if we want to be responsive, you have to sort of take stock of where you are today and then look to where you're trying to get in the future. Otherwise, you have no baseline upon which to plan your future. You'd start describing the circumstance we have today that's going to sound anti-Reclamation, anti-agriculture, because it goes something like this: if you look at water in the West today and you try to be objective, you will say, "Okay, here's where we're at. Almost every surface stream is fully appropriated." That means the states have allocated the use of all the water in almost all the surface streams in the West. Its been ninety years people have been applying for water rights. That shouldn't be surprising.

Senior Water Rights

Who holds all the senior water rights? Most senior would be mining. Second most senior is agriculture. That's how the West developed. So the people diverting all the water with the most senior rights are agriculture. Prime example, Imperial Irrigation District has the most senior right for diversion of water to California on the Colorado River, and they are tall dogs, 3 million acre feet of water in Southern California, where 3 million acre feet of water is worth incredible money in this growing community that doesn't have enough water. So when there's a struggle, the struggle is urban growth against agriculture, because agriculture holds the senior right. Same thing's happening on the Front Range in Colorado. All the senior rights are held by agriculture.

Now, where you built a Reclamation district to be able to effectuate those rights, like the Northern Colorado Water Conservancy District, then Reclamation is held in the same view as agriculture in general. Now that there's incredible pressure to convert agricultural water to urban use or there's incredible pressure to convert agricultural water back into some in-stream flow, because, remember, the rivers are all fully appropriated and so all the water is being diverted by the most senior users, generally agriculture, they bear the brunt of criticism and pressure from changing that, and it feels anti-agriculture.

Now, you have Indian water rights that are now starting to be quantified, that predate the irrigator, but when they're quantified, the Indians—either the federal government—somebody has to build them new storage, come up with a new water supply for them to satisfy their entitlement, or the water has to come from the existing irrigators, because they currently have

the right. It feels anti-agriculture. It feels anti-Reclamation because Reclamation built many of the irrigation districts that are utilizing the Indians' entitled water, like on the Riverton Unit and the Wind River Indians.

All of the pressure today in the West is being felt by the rural agricultural community, because the people moving in are demanding some of the resources that they've had a historic entitlement to use. To date, for the most part, it hasn't been played out as a value judgment, a criticism of the decisions that were made before, but that's irrelevant, because the manifestation of it, the actual effect of it is to be negative against those historic communities and our historic constituency. So its much more complicated.

We'd like to turn it into six glib terms and make into a states' rights issue or property rights issue, but its not that simple. Interestingly, when I went to B-L-M, the transition wasn't that difficult, because the exact same thing is occurring in B-L-M with public-land ranching. You have public-land ranchers that have had an entitlement to run cattle on the range under a permit for fifty years, as long as B-L-M has been around, and before that, they ran cattle on the range, unregulated. B-L-M only came along to put form and structure to the use of the land, not to change things. Well, now, today, people want to get cattle off of the range because they think it affects the riparian, because they think it competes with wild horse and burros, because they think it competes with elk, black-footed ferrets, the whole gamut, and the public-land rancher feels under attack. And he believes, or she believes, that these attacks are motivated because they don't have an appreciation for the nature and culture of their community. So they create an environment in which they think their community's under attack, and it turns into a states' rights issue or a property rights issue, and its exactly the same.

Losing Historic Entitlements

I tell the water users the same thing I tell the public-land ranchers. They have to expect the fact that they're going to lose these historic entitlements that they've had. They are. Irrigators are going to lose the right to use water, and public-land ranchers are going to lose the right to use the range as they've historically used it. I think that is not a question. That is not a question. That is happening today. The question is not that, is it going to happen, because it is. This increase of 30 percent in the population over the next twenty years, do you think these people are going to be denied water? Do you think the urban growth in this community will be denied water? No. It will not happen as a social issue. The Indian water rights will be ultimately resolved, and Endangered Species Act is going to push recovery of a lot of the riparians. That's going to happen, and nothing's going to change it. Call it progress. Call it regression. That's all a matter of view, but the change will occur.

The real question is not whether its going to occur and not whether it's going to impact the irrigator or the public-land ranching. The real question is how are we going to tend and care for these people who are sort of the innocent victims of the change? How do we be mindful of the effects on these rural communities that we all care about as this change occurs? That requires more thoughtful discussion than we've had to date where we've just picked sides. That's the vision I have for Reclamation.

Now, I don't see Reclamation, as some people, as the fair broker. I hated the term "fair

broker" when we started to want to use that about four or five years ago, that Reclamation was going to become the fair broker. Reclamation has too much of a vested interest to be viewed as the fair broker. I believe Reclamation's role is to step up and assume the responsibility as the project manager, to run healthy public processes, to make these decisions in a constructive forum so that we reduce the impacts, the unintended impacts, to the historic users while we satisfy these emerging needs. That's Reclamation's role in the future. It is fifty times harder than the construction of any civil works project we ever built, because building a civil works project, you're dealing with physical science, which is very predictable. You have foundation materials. You have the nature of the material you're constructing with. You have a site that has physical conditions. All can be measured. You have techniques to deal with it.

The problems we face in the future are about human dynamics, and human dynamics are not predictable, and we don't have good social processes to deal with it. Otherwise we wouldn't have prisons full of people and neighbors fighting neighbors. I mean, dealing in the human dynamic, which is what the future's all about, is a hundred times more difficult than it ever was in the past. You were observing how busy the regional directors are, and you attributed a lot of that to the flattening of the organization. I attribute it even more so to the fact that R-Ds used to deal with a single constituency on physical issues. On physical issues today they deal in a human environment with all constituencies. The human dynamic is just an incredible thing that we only know just a minuscule about.

That's the vision for the future of Reclamation. If people don't like that, then they ought not to aspire to leadership roles in the organization, because it's what they're going to do. It is the nature of the job. That's why you see different area managers today than you saw in the past. They're looking for people who can manage very dynamic human processes, because they can hire the engineers who can deal with the very predictable civil processes, but the people in charge, they have to deal with incredible human dynamics. And the ones that are able to do that are viewed as phenomenally successful, the Roger Pattersons³⁵ and John Lawsons of the world. The ones that aren't are leaving Reclamation unhappy, wishing for the past. It will never be like it was, and it isn't attributable to anyone. It isn't attributable to Jimmy Carter or Guy Martin or Dan Beard or Don Glaser. It is attributable to the change in society, and they just need to know that. When they accept that, then they're going to be able to deal with the change.

Storey: Let's talk about this public forum issue. When you go into a public forum to talk about an issue like water, you have an incredible diversity of interests, many of which are conflicting, and ultimately, when you get down to the bottom line and the end of the process, Reclamation has to make some decisions.

Glaser: That's right.

Storey: Somebody's going to be unhappy.

³⁵ Roger Patterson became regional director of the newly established Great Plains Region in 1989; he later went on to become regional director of the Mid-Pacific Region from 1991 to 1999. Mr. Patterson also participated in Reclamation's oral history program. See Roger K. Patterson, *Oral History Interviews*, Transcript of tape-recorded Bureau of Reclamation Oral History Interviews conducted by Brit Allan Storey, senior historian, Bureau of Reclamation, from 1994 to 2000, in Sacramento, California, and Lincoln, Nebraska, edited by Brit Allan Storey, 2011, www.usbr.gov/history/oralhist.html.

Glaser: That's right.

Storey: How do you try to make sure that you're making the right kind of decision that's in the public interest, because you've got all of these publics out here, many of which don't agree with you?

Glaser: That's really a good question. That's a good question to ask of everybody you interview, because you'll probably get the most diverse response on that.

Storey: I asked it just on Tuesday, as a matter of fact.

Making Right Decisions

Glaser: My opinion—and this isn't shared by a lot of people in government, Reclamation, or even in the contemporary books today—I don't believe very much in group decision-making processes. I think groups don't make decisions very well, because groups will tend to make the lowest-common-denominator decision. It'll be a very compromised decision. If you're trying to get the one that is least offensive to all parties, in trying to get the least-worst decision, you may end up with the worst decision for the long term, because a group generally is focused on an issue of today. And if we're going to be making resource decisions, we need to be thinking about the future, because when we make a decision, we commit a resource for a long time, and we commit resources for forty years in a contract. I think we should.

I think our contracts need to be longer rather than shorter. I disagreed with both Dan Beard and Ed Ossan³⁶ on that. They wanted shorter terms for contracts. Ed Ossan wanted ten-year rolling contracts. Dan settled for a twenty-five-year term for a contract. I always argued for a forty-year term for a contract, because there has to be predictability in the decision, stability in the decision. Because we make investments on it, we make individual investments on it, we make social investments on those decisions. The flip side of that is you lock resource up for a long time. So when you're making a decision today, you have to be very thoughtful about where you're going to be forty years from now, and you don't deal with that as a decision well in a group.

I think the Congress was very wise when they put NEPA together, because NEPA does not provide for a group decision. NEPA provides for a fair evaluation by the public of a federal decision, but is clear that the decision rests with the agency, the action agency, and the process is intended to provide fair and open input into the decision and a fair evaluation of the effects of that decision. I think group processes serve very well for that purpose, because the more people that look at an issue, the more clarity you get for the potential positive and negative impacts of the decision.

So, I'm not much of an advocate for new management principles that say everything's decided by teams. I think decision makers still make the decision. But I am an advocate for

³⁶ Edward Ossan was the Bureau of Reclamation's director of policy and external affairs from 1994 to 1995. Mr. Ossan participated in Reclamation's oral history program. See Edward Ossan, *Oral History Interview*, Transcript of tape-recorded Bureau of Reclamation Oral History Interviews conducted by Brit Allan Storey, senior historian, Bureau of Reclamation, in Washington, D.C., edited by Brit Allan Storey, desk-top edited and published by Andrew H. Gahan, 2013, www.usbr.gov/history/oralhist.html.

good processes for gathering information about the effects of the decision and good criteria upon which to make the decision. I'm also an advocate for people clearly understanding the nature of the process, up on the table so that they understand it, and that they understand the nature of the criteria. Then I believe in honoring the process and the criteria. Right now, part of the difficulty—and this works whether it's a reorganization like we went through here or whether it is a revisiting of the use of project facilities—to me, they're exactly the same human decision making processes. When we tried to reorganize the Denver Office, when we did reorganize the Denver Office, I tried to lay the criteria out for all people to understand what it was we were trying to achieve, and then we put good processes in place, and then I tried to let the processes run, and I honored the output of the process. I think we have to do the same thing as it relates to decisions on the use of natural resources. I think we should do the same thing on zoning and planning.

We're starting to get better at it, but in the middle we kind of got confused into thinking instead of the data-gathering processes and feedback processes for a decision maker, somehow we abdicated our responsibility to make the decision to the group, and groups never arrive at a decision. They can't get closure, and processes run forever. Why do you think they haven't been able to re-license the Kingsley powerplant on the Platte River even though the license expired in 1988? For fourteen years they've been going through a renewal process. They can't get through the process because they've somehow got the decision out in the public, and the public's never going to agree. The decision rests with FERC [Federal Energy Regulatory Commission], and they need to make the decision. Now, interestingly, people go, "Well, yes, but we're going to get some bad decisions." Take Two Forks for an example. Remember Two Forks?

Storey: I remember Two Forks.

Glaser: Two Forks ended up being an issue that people in this community split right down the middle on, and it was the biggest darned flap you ever saw for fifteen years. The Denver Water Board says they spent 40 million dollars trying to satisfy NEPA obligations and E-S-A consultations. In the end, it was decided we wouldn't build Two Forks.

Storey: By E-P-A [Environmental Protection Agency].

Glaser: By E-P-A. But it was decided. Now, I would ask you this. How much of a controversy has that been since the decision was made? None. Because, as a society, we were able to say, "Okay. That's not an option. What are the remaining options?" The Denver Water Board and the other Denver communities began to explore the other remaining options. If they would have not made a decision ten years ago on Two Forks—well, not ten years ago, seven years ago on Two Forks—the same degree of controversy would occur today in this community, and the Denver Water Board would have never gotten on to other options.

Most of these interest groups on the social service side of the equation, like utilities and irrigation districts and power users and stuff like that, they want the decision. Now, they want a favorable decision. Their pecking order would be, "Give me a favorable decision. Well, you're not going to give me a favorable decision, give me an unfavorable decision." Third in the order, "Get it into a process where there's never a decision." That's the worst scenario for

them, and if you put that together with a changing West where the population's going to increase by 30 percent in twenty-some years and no decisions, you're going to have calamity. You need "up" decisions or "down" decisions, and that means you don't put them into group decision processes. That means you gather information through group processes, and decision makers made decisions. You move on.

Now, you always ought to be able to come back and revisit your decision, because we make bad decisions. But it's better to make a bad decision and come back and revisit it than to make no decision at all. That's sort of where we find ourselves today. That's where Reclamation find themselves in a lot of instances.

Storey: Good. You touched on this next question. You've touched on this before, today, in the discussion, the fact that water is going to transfer from irrigation to M&I, [municipal and industrial] basically, and you said it's going to happen.

Glaser: It is happening.

Storey: You didn't say how it's going to happen and what the issues are going to be that are involved in that happening.

Transferring Irrigation Water for Municipal and Industrial Purposes

Glaser: That's a really good question. Let me make it clear, it *is* happening. It is happening that the peak agricultural use of water in the West occurred around 1980. Since that period of time, urban consumption is on the incline and agricultural consumption is on the decline as a matter of total water used in the West, and it's for a lot of reasons. It's because of conversion, it's because of new technologies, it's because of changed crop patterns, for a lot of reasons. But nonetheless, agriculture has been declining as a percentage of the total use of consumed water in the West since 1980.

My daughter goes to school at the University of Northern Colorado-Greeley. All you have to do is drive up to Greeley and drive into town on the road that runs into the main street of Greeley, some highway, I don't know what it is, but as you're going into town, you're going to see these nice, square 360-acre parcels of land that say "Zoned Industrial Site For Sale." And you're going to look at it, and it's going to be right in the middle of other nice 360-acre square parcels of land that are raising corn, and it's going to look surprisingly like last year's corn field, and that's somebody who sold their water to Thornton and now is selling their land to industrial development. That's happening all the way through this area here, that these cities are buying up water from irrigated agriculture and bringing it into the cities. That's part of the solution to "no Two Forks." It's one that Arvada's been working on, something Park, Union Park, that they can't get built up on the Platte River watershed.

Water's converting. Now, how is it converting? That depends on the state. Every state has its own rules for the conversion of water. Every Reclamation project has its own authority idiosyncrasies. So, each area that is growing is having to solve their problems in their own way. In Colorado, we have probably the closest thing in the West to an absolute property right on the use of water and the ability to sell that use to another bidder. The state merely

looks at third-party impacts, and if there are no third-party water impacts, then you can sell your water, if you're an irrigator at Northern [Colorado Water Conservancy District], to the city of Thornton to make the money. The Reclamation law and contract allows Northern to manage that. So that's happening in a fairly open market.

Wyoming has just the opposite. If you want to change the use of water in Wyoming, it takes an act of Congress. So if you're a district and you want to sell water to Cheyenne or Casper, then you have to go in and get the state legislature to approve the change in use. So that's sort of the extremes. On the Colorado River, everybody's watched Las Vegas. Las Vegas has grown. Its been growing faster than any other community in the country ten years running. I mean, the growth is just phenomenal. As hard as that is to understand, it is happening, and it seems unquenchable, the growth. They've nearly grown out of all the land that's available to develop. They're up against all the B-L-M land in Nevada, and they're starting to put pressure on land exchanges so that they have more room to grow.

Nevada, when they divided up the Colorado River, they got their 700,000 acre feet³⁷ or whatever it was, because when they divided up the Colorado River, when they compacted the thing, everybody was thinking in terms of agricultural use. So California got most because they had Imperial [Valley], and Imperial was the first user on the rivers. Then Arizona got a lot. Nevada didn't get any, because people looked at Nevada and said, "They're never going to raise crops out here." Nobody ever envisioned that this mudhole called Las Vegas would ever be the fastest growing city in the country, and they never envisioned a state that would have that kind of population. So they didn't attribute water to that, so they don't have enough water today.

So how are they solving that? They're striking a deal with Arizona, where Arizona groundwater banks Colorado River water and leases the rights back to use their in-stream flow entitlement. Now, that has to be worked out between the three lower basin states. Very controversial, very complicated, but they're solving that because they have to. They have to. They're not solving it because they want to. Arizona's not participating in this because they want to. Arizona's participating because they have to, because they cannot not solve Nevada's problem, because you know what will happen? The federal government will solve Nevada's problem, and that would be the worst thing that could happen in the eyes of the states.

So, different places solving it in different ways. In Idaho, water banks are a big thing. In California they use water banks, and that is that you're able, if you raise an annual crop, you can sell your annual entitlement to water to the water bank, and they give you money and you don't raise your annual crop, and then that's water's available to meet a critical demand somewhere else during drought periods. During the seven-year drought in California, the last three years of so, California put a water bank in place, and agriculture was selling their water to the water banks so that cities could have water. The permanent crops, who are the junior users, vineyards, pecan groves, they're the most junior users, and if they didn't get water, they're going to lose their permanent crops, huge economic loss, so they would pay more money than the guys who are raising annual crops, forage crops, to get water. But did they do that voluntarily? No. It took four years of drought and then being up against the margin of

³⁷ Nevada's yearly allocation of Colorado River water, based on the Colorado River Compact, is 300,000 acre feet.

losing this incredible . . .

END OF SIDE 2, TAPE 2. FEBRUARY 6, 1998.

BEGINNING OF SIDE 1, TAPE 3. FEBRUARY 6, 1998.

Storey: This is Brit Storey with Donald R. Glaser on February 6, 1998.

Glaser: So the long and the short of it is, every state and every area is solving the problem in their own way based on their own state water laws, the authorities of the projects, and whatever social issue is driving it. But what they all have in common, in my opinion, is it takes some incredible social pressure, some calamity on the horizon before it forces the institutions to change their own criteria to allow these efforts to occur. So they get pushed right up to the brink, and when they can start to see the depth of the precipice, that is when they start trying to figure out solutions. My concern is the West is going to change so fast that we're going to be looking at the depth standing squarely over it.

Storey: Without much under our feet.

Glaser: Before we start to free fall. That's right, because its just changing that quickly. I don't know if that's useful, but . . .

Storey: That is. Have you ever pondered the issue of the way water has been dealt with in the American West? We had the public lands, which were disposed of throughout the West through the Homestead Act, the Carey Act, and various other acts.

Glaser: To a greater or lesser extent. Nevada wouldn't tell you they were disposed of. [Laughter]

Storey: Yes. A lot of them have been retained, of course, because nobody wanted them, largely. We had mineral lands, we had coal lands, all controlled out of the federal government. Yet here's water, I think arguably the most valuable resource in the West, and the federal government said, "We're not going to control that," or they didn't choose to control that at some point. Have you ever contemplated that as an issue?

"The Manner in Which the Authority for Water has Evolved"

Glaser: No. I've thought a lot about the disposition of public lands as an issue, but I just accept the manner in which the authority for water has evolved. I mean, it just is what it is, and I think it is not going to change substantially. Nor am I an advocate for it to change substantially. I'm not much of an advocate for doing away with prior appropriations.³⁸ A lot of my friends are. A lot of my friends aren't. But I'm not an advocate for the change of prior appropriations, the

³⁸ "A prior appropriation right is established by applying water to a beneficial use either by diverting from a stream or by pumping groundwater. Beneficial use is usually defined by statute or case law as the use of water in some productive capacity. The priority date establishes the superiority of one's right to the use of water and is usually the date of the first application to beneficial use. The quantity of water that can be appropriated under this system is limited to the amount needed to irrigate land to which the water is appurtenant. A prior appropriative water right can be lost through nonuse by forfeiture or abandonment." See Charles T. DuMars, Marilyn O'Leary, and Albert E. Utton, *Pueblo Indian Water Rights: Struggle for a Precious Resource* (Tucson, Arizona: University of Arizona Press, 1984), 3.

doing away of prior appropriations. I'm not even an advocate for greater federal involvement, greater federal authority in the allocation of water. I see not a lot of advantage in trying to take that as a position, because all that does is drag you into an endless debate that's square at the heart of western politics, and I don't see that as serving the public very well. I don't see any solutions in that.

So what I ponder is, first of all, I'm a person who always tries to understand the truth, the reality of the laws that we have created for ourselves. I just try to understand them. I read a lot about western legal systems and western laws, including water, and I try to understand it, because I take those as a given. Then what I try to do is look for solutions to the problems, given the foundation upon which we've built our social systems. Now, the solution may mean some law has to change, but I'm not into revolution. I'm into evolution. I want us to evolve along the margin. I'm more interested in good decision processes and honorable data and honorable criteria than I am the laws under which we have to solve the problem. The law is pretty—that's not very useful but it's how I approach everything.

When I went to work on the San Pedro [River] as the sort of federal facilitator of this water-right settlement on the San Pedro, before we ever got into solving the problem, I made everybody step back and say, "Okay. Do we all agree on the science? Do we all agree on the quantity of water? Do we all agree on the effects of pumping? Do we all agree on the hydrology, the connectedness of the river and the aquifer? Do we all agree that we have good models? Do we understand this?" Because if we didn't understand the nature of the problem, and if we didn't understand Arizona water law, and if we didn't understand any of the entitlements under federal law, and if we didn't all understand those the same, we were never going to come to a solution. So I'm a believer of backing up and accepting the laws that we've created as a society as a given right along with the hydrology, the biology, the sociology, the economy, and then putting those together to make the best social choice.

I have no preconceived idea of what the right social choice is. I have my own values, but my values, because of my background, sort of cover the spectrum. I feel just as strongly that we need healthy rivers and riparians as we need healthy economies. I think society says, "We don't want to live without either of those. Don't give us choices and make us choose between healthy riparian and healthy communities, because we see them part and parcel the same." So I'm always looking for solutions that satisfy the collective whole, because I value all of those interests. I think so does society. The problem is you're always dealing with groups that want to make you choose between one or the other: drain Lake Powell or lose the Grand Canyon. Those aren't choices society can make, but that's how the issue gets postured, and I think it's postposterous.

I'm really disappointed in the Sierra Club for postulating, "If you don't drain Lake Powell, you sacrifice the Grand Canyon." I go, "Nonsense." I've been down the Grand Canyon. I think I understand the science of this thing at least as much as the layperson can, and that is not a choice we should put in front of society. But that's what we tend to do. The agricultural communities say, "Okay. It's either feeding your family or having a healthy environment." Well, nonsense. You can have a healthy environment and feed your family. You shouldn't posture it that way. That's Chicken-Little politics, "The sky is falling. The sky is falling." The sky is not falling. This is the greatest of all times. We just have hard choices.

Storey: You've talked today about diversity and different kinds of thinking and that sort of thing, yet at the beginning when you were talking, you mentioned how you bought into sort the reaction to the "hit list" and that kind of thing.

Glaser: Sure.

Storey: When did that begin to change for you, and what caused it to change?

Changing Perspectives

Glaser: When NEPA first passed, and E-S-A was a new issue, and people started raising questions about Garrison, I had no data. I was just a new kid in the organization around all these sage people. So I was very influenced by what you hear every day.

Storey: People talking.

Glaser: That's right, and everybody saying the same thing. Everybody in my sphere of influence, because I was just this guy in the organization, I didn't get to see outside, because I stayed at my desk and did things and heard everybody who went outside talk. So my reality was what they provided me. But then I began to read things. I read everything. I read a lot of things. I read things that said there's other ways to look at this. You read it, and you go, "Well, there's merit for what these people say. Wonder why we don't consider this?"

Then I started getting out the door myself, and I started going to North Dakota, and I'd got out to the prairie pothole area. You need to remember at that time prairie potholes, wetlands, were things that nuisances only meant to be drained.

Storey: Because they were in the way of efficient farming.

Glaser: Yes. They were in the way of farming. They were in the way of subdivisions. They were in the way of parking lots. They were just nuisances, no productive value. You had this whole segment of society going, "Well, wait a minute. They serve flood control purposes. They flow through groundwater recharge. They purify the water. They're a duck habitat." And we just discounted that, as an institution, just said, "Nonsense. There's no value to these things." That's what we were saying. But you'd go out there and you'd look and you'd go, "Well, wait a minute. Wait a minute. Common sense says that these things help in flood protection. Common sense says they help in groundwater recharge, because if you put it in the ditch and run it to the river, that water contributes to high flows, but if you put it in the ditch and run it to the river, you don't get percolation. If the wet areas disappear, along with their dense vegetation, you lose habitat." Common sense said that was true. To what degree? I didn't know. Science tells you that. But common sense told me that there was merit to what these people were saying and it was not responsible for us to just reject it out of hand because it was convenient.

So then I would study about it and I would read more. I'd go read about wetlands. I'd read things that we didn't have in our library, because we didn't care about that at that time, and I just, over a period of time, built a foundation of knowledge. I'm an inquisitive person on

the surface. If you tell me something is so, I'm going to consider whether that is so. I'll compare it against all my experiences of what other people think, and then I'll come back and visit with you. I'll say, "Okay, Brit, now what about—" I've done this to you twenty times. "Well, what about this? Well, what are we going to do with this? And how come?" You know. It isn't that I disbelieve you; it is just that I want to validate what you're telling me. That caused me problems along the way, because people would think either, one, I didn't believe them, or, two, that I was some sort of smart ass, or, three, that I thought I knew everything, or, four, any one of the other things that people have said about me that you've heard. But me, I was just trying to validate statements. It was no lack of faith or disrespect for the person making the statement. If you're going to tell me something and I'm going to opt it to be true and advocate that, I want to understand its true and worthy of my advocacy. And that made me different than most of the managers in Reclamation, which was both good and bad.

Now, I advocated things I believed in, and I believed in things because I would test them against all communities. I had very good friends in Fish and Wildlife Service when that wasn't popular, because they had all the biological knowledge, and I'd challenge them just as hard as I'd challenge my own people. My people would say something, I'd go over there and said, "Okay. My people say this. You need to tell me why this isn't true." They would give me a bunch of information, and I'd go back to my people, because they don't talk to each other, say, "Okay. Fish and Wildlife Service says this. Now, why isn't this so?" And after a while you would formulate a position that was somewhat different than both. My objective was always to get all these people in the same room and let them formulate their own collective judgments that were somewhat different, but it took us fifteen years to get there.

Storey: Interesting. Who was Dave Wyman?

Dave Wyman

Glaser: Dave Wyman was, and still is, a consultant in Washington. He is one of the most unusual and interesting people I've ever met. He's a consultant. I mean, that's what he does. That's what he's done.

Storey: For . . .

Glaser: For himself. He's just a consultant. He is a one-person consulting firm, has been for thirty years. When he was a one-person consulting firm back in the mid-seventies, he was also advisory to the White House on water projects and helped formulate the hit list as a matter of public policy. He's a good friend of Dan Beard's. He's consulted with Audubon Society. He's also consulted with Westlands Irrigation District. But he is the most unusual thinker of all the water consultants that are out there. His view is a little different. He's a very special person. He's a friend, although I disagree with about half of what he thinks, and he disagrees with about half of what I think. He would still support me for any position at any time in any place, and a very interesting guy. He's an insider. He's been inside the Beltway for thirty years, mucking around in water. Because of that, he's a great historian. Interesting guy.

Storey: You were talking about people saying, well, all the projects get repaid. Tell me about what

the issues are that you see and what you think the reality is.

"All Project Costs Don't Get Repaid"

Glaser: Well, all project costs don't get repaid. We know that. Irrigated agriculture was subsidized. We know that. Not all of us know that. There are people in Reclamation today yet that don't know that irrigated agriculture was subsidized. We have regional directors who didn't believe that twenty-five years ago. They just didn't know any better. But the fact of the matter is, irrigated agriculture was subsidized, subsidized by power, subsidized by the Treasury. The subsidy by Treasury was because it was repaid at zero interest over very long periods of time, and that is a subsidy. Subsidization by power is that above the irrigator's ability to pay on multipurpose projects, power picks up irrigation costs at zero-interest-bearing as aid to irrigation. That's a fact.

Now, Reclamation beneficiaries repay a lot of the cost, and they pay all the O&M costs. My issue with Reclamation was their need to not tell the truth, see, because I think the truth is not necessarily bad. To me, to say the American public subsidized irrigated agriculture, I go, "Duh." That was the national policy for a hundred years, for two hundred years. What's alarming about that? So what is wrong with acknowledging the truth? It was a social decision. Congress decided that to subsidize agriculture was in the interest of the nation-period. The end. So what? So why do we have to construct our own story that was untrue, manipulate the facts to tell a story that was not truthful, in order to avoid saying what was true, and that was it was the choice of Congress to make these decisions? Period. Just like I would get as angry at the environmental community who want to characterize public-works farmers or public-land ranchers as welfare farmers or welfare ranchers living at the trough. I thought that was just as disingenuous.

The truth is what the truth is. Congress passed a series of laws for the greater good of the American public at a time when they were trying to settle the West and provide stability in the national interest while they were trying to connect an economically viable West Coast with an economically viable Midwest. They were trying to fill the void with stable economies, and I see nothing wrong with that policy. If there's anything we should feel bad about, it's the manner in which we treated the Indians in conducting that policy. It isn't that we subsidized a farmer to raise a crop in Powell, Wyoming. I mean, there's no shame in that. That was a calculated public decision. What bothered me was, we weren't willing to argue that point. We wanted to make up an untruthful story so that we could feel better about what we did. I felt very good about what we did with the truth being known. So I was always running around saying, "Wait a minute. Wait a minute. That's not what these numbers say. We ought to tell the truth. The truth is this."

They'd go, "Oh, we can't say that. We'll get criticized."

I'd say, "We aren't going to get criticized, because we didn't decide the conditions of repayment. That's embodied in the law, and the law is passed by Congress. How can we feel bad about doing what Congress willed us to do as an agency?" I mean, we argued the wrong point. The reason I didn't want to do that was twofold. One, it just drives me crazy to say something that is not truthful on its surface. That's why I didn't like most of the

propaganda we put out, or most of the propaganda the critics had put out, because what we would say was not truthful on the surface. It tried to give an impression that is more favorable. They'd go, "Well, yes, but that's what we should do." Not me. I'm a public servant, and I want to put out something that is truthful, and I'll let the public decide whether its favorable or unfavorable. I'll argue for the Reclamation program and the merits of what it did along with any other person, but I'm going to argue it with facts that are irrefutable, because to do otherwise is to make yourself vulnerable to a criticism of the interpretation of your facts. Then you become an easy target to critics.

"We Kept Saying Things that Weren't Exactly True"

That's what we were as an agency. We kept saying things that weren't exactly true, and people would take our own numbers and rip us apart in the public and in the Congress, and we lost credibility. At a time when credibility meant the most, we didn't have any. We didn't have to do that, because we could have argued our program straight up, and it would have passed any straight-faced test and they could have picked us apart. They would have had to pick us apart on the merits, and that would have been a lot harder. I didn't convert everybody to that way of thinking. We still put out stuff today that is less than honest on its surface. Now, every fact will be correct, every number, every reference, but when you go back and look at those objectively in the light of day, they will tell a different story to almost anybody else.

I mean, we should not be ashamed of the fact that we had a repayment contract that's zero-interest-bearing for 180 years. You don't have to be a real good mathematician to know zero-interest-bearing for 180 has no face value. No face value. But the fact of the matter is, Congress passed the law that allowed us to give a contract to somebody that was zero-interest-bearing for 180 years, for whatever reasons. I would only be sad if we went in and misinformed the Congress and got them to pass that bill. The fact they passed the bill, that's none of my business; that's Congress' business.

Now, I'd be inclined to go back today—I told Dan Beard this, I said, "Dan, we've got all these contracts out here, we've got some contracts that have no value, except we administer them, carry them in our files, and administer them for the next 180 years. Why don't we go to Congress and say, 'You know, you passed these relief acts.'" That's what they're called, relief acts. Fact Finders Act was a relief act.³⁹ We passed these relief acts to give these people more beneficial repayment obligations, and we did that as a cognizant decision. We ought to go back to Congress and say, "Well, you passed this relief act, and you gave these guys 180-year repayment period at zero-interest-bearing. We would suggest you just write off their indebtedness, because there isn't any sense in us carrying this on the books, because it has no present worth value. We might as well just write it off and save us all the administration."

Now, I thought Dan would like that because it would demonstrate just how little value

³⁹ The Second Deficiency Appropriations Act for 1924, commonly referred to as the Fact Finders Act, authorized the secretary of the interior to write off unrealistic construction charges, suspend existing twenty-year repayment schedules, and defer payment charges during lean years. The act also permitted Reclamation to screen potential settlers, and required potential settlers to have at least \$2,000 in capital. See Donald J. Pisani, *Water and American Government: The Reclamation Bureau, National Water Policy, and the West, 1902-1935* (Berkeley and Los Angeles: University of California Press, 2002), 141.

180 years zero-interest repayment contract had. It would have been great press if I thought Dan would pick up on that. What I was trying to do is, I was trying to get us to be more honest. The water users wouldn't have liked that, by the way. You know, they wouldn't have liked that 180-year repayment period forgiven.

Storey: Because?

Glaser: Because it would have said that they weren't repaying the project, and it kills the myth. That's kind of a sad thing, because they shouldn't feel bad about that, because it wasn't their decision to grant them the relief. Do you think Chrysler stockholders feel bad today that the Congress granted Chrysler the single greatest corporate relief program ever granted by the Congress, ever? Do you think Lee Iacocca is embarrassed about that, for having crafted that? He's saying, "No. I saved an institution that creates incredible jobs that now competes with Japan and is a business standing on its own, and I convinced the Congress to do that." So why should irrigators feel any more ashamed of being granted relief than Chrysler? Do you think Western Pacific would have felt any shame about getting relief in the courts yesterday on their bankruptcy deliberations? No. They only feel bad that they didn't get relief and they're out of business today.

But somehow there is this—and it gets down to the nature of the West—there is this inherent—farmers and ranchers, like a lot of community, they're rugged individualists who believe in their own individual ability to control their life. I mean, they're individualists, and for them to think that somehow makes them different from corporate America. Corporate America would take a relief break in a heartbeat because they're businessmen. When they get a business that comes into town and they give them all this property tax relief to get them to relocate here, that's why all the businesses come, somebody gives them this big sweet deal, do you think Pat Bowlen's⁴⁰ going to feel really bad if we pass a 1.1 percent tax increase to give him 70 million dollars to build a stadium? No. If we don't do it, he'll take his team to some other town that will, but that's because he's not a rugged individualist; he's a shrewd businessman.

Farmers and ranchers, they're rugged individualists. They can't stand the thought that somebody is giving them something for nothing. They can't stand the thought. So they get these really convoluted arguments that we got caught up in. We perpetuate myths that aren't true. The sad thing is it doesn't matter, because it was the public policy, and that should be the debate. But we get mixed up in all these other things, and we became part of it, because we became attached to our community, and we didn't serve them well by trying to misrepresent the truth, because the truth was not damning. The only thing it was damning to was the egos and individualism of the individuals themselves. Such is human behavior.

Storey: I think we're approaching the end of our time. Why don't I ask you the question that I lost on the tape when we first interviewed—well, it wasn't a question, but because I was inexperienced at running the tape recorder and I didn't look at it often enough.

Glaser: If its still turning right now.

⁴⁰ Pat Bowlen is the owner of the Denver Broncos football team.

Storey: Its turning now, but sometimes the tapes don't sit just right, and it binds up.

I think maybe you were assistant regional director, and you were talking about the issues on the Platte [River] and the changes to the channel and the vegetation and the sandhill cranes and your involvement in all of that as assistant regional director.

Platte River Issues

Glaser: They were pretty prophetic seeing as they are back today now starting working on the Platte River M-O-U [Memorandum of Understanding]. Platte River was a really interesting issue for me. I'm from Montana, so I'm a Montanan, and being a Montanan, you know, it wasn't real hard for me to understand what a really good river was. I lived on the Yellowstone, and the Yellowstone [River] is the last real free-flowing river in the country. I mean, its free-flowing from its headwaters to its confluence with the Missouri. Reclamation's tried to dam it a few times, by the way, but it remains free-flowing today. In Montana, a good river had certain characteristics, and that was the water was cold and they had variable hydrologics. In the spring you have high flows, and in the summer and fall you have low flows, and the high flows clean the gravel beds and you've got spawning for your native fishes which were salmonoids or trout mostly. As it moved down the system, you had more warm water fisheries came in.

But as humans came into the systems in Montana, two things were the ruination of a river. One of them was depletions; they just took all the water out of it. That was hard on fish, hard on other critters. The other one was they contributed silts back to the river from farming, from other industrial activities, mining, highways, urban developments, anything that would allow silts to get caught up in the runoff and take it back to the river. Silt was the death of a good river, as was water temperature, because it killed off the native species that responded to it.

So I thought I understood all this stuff. I thought I was pretty tuned into this, until I went down to work on the Platte. I went off to Central Nebraska where we were working on Prairie Bend. We were just initiating consultations on the North Platte operating projects. I went out there, and the first thing I saw was, as I flew down the river channel from [Lake] McConaughy, the other things that good streams in Montana had in common, all good streams that I've ever seen, is that really nice canopy forest, cotton, willow, the banks were real stabile with rose thickets and islands were covered with willows and rose thickets so that it held the banks in place, and that's what let them take big flows without stripping the channels and would let them wash the gravels instead of bringing more sediment down, and the canopies kept the rivers cool. I went out in Nebraska, and I was flying down the Platte River, and I saw this nice river and saw all these cottonwood trees and rose thickets and willows and thought, "Well, this isn't what I read in history," because you read the history of the Platte as being a mile wide and an inch deep and wagon trains having to cross at certain crossings so they didn't get in the quicksand, and not a tree to be seen. I mean, that was the history of the Platte if you read about the Oregon Trail and the people coming across and the Mormons.

What I saw wasn't that. I saw this incredibly treed, ribbon river and the water was nice and blue and it was cold and it was clear. I thought, "What a nice-looking stream. I wonder

what the big environmental flap on this one is." When I got down to Grand Island and went out and met with the people at the Crane Maintenance Trust.⁴¹ Here I saw them out there with these great big tree removers, chopping these trees down, throwing them in a pile and burning them. I saw them out in the channel with a D-8 Cat pushing the islands down and pushing the banks of the river down, stripping the vegetation off, and it was about all my social conscience could bear to watch. It made such an impact on me. They were doing it in the name of ecology. It just like short-circuited me, and so I put a lot of energy then into understanding the ecology of the Platte River and why these ecologists would be doing something there that, in Montana, would be subject to million-dollar fines under the Clean Water Act, Endangered Species Act, and every other controlling legislation.

Inherent Biases

The lesson in all that was this, that all of us, including myself, who I thought to be pretty enlightened at the time, carry around these incredible inherent biases, and they are the social conditioning that we're given based on the environment in which we grow up. It doesn't matter what the issue is. It doesn't matter if its about social issues and ethnic prejudices. It doesn't matter if its about my attitude towards women. It doesn't matter if its my attitude towards the environment in which I live. All those biases that I harbor are a condition of the environment in which I grew up.

For me to understand the sociological needs of any community and the biological needs of any ecological system means I must understand the sociology and the biology in place. Because the historic conditions are fundamentally different from community to community and from watershed to watershed. I fail my public obligation if I carry my biases with me and I'm not open to understand the physical and the human dynamic in this new area. It was a tremendous lesson for me, and its helped me immensely since, and its helped me walk into areas and leave my biases at the door and begin understanding the issues they're dealing with in their own community and to give value to the opinions and the needs of the community, not based on my screens of what's socially good, but based on their screens of what's socially good.

Otherwise, for me to go work in an area like Southern California, I would be of no value to resolution of an issue down there. I could not comprehend what 14 million people deal with as social, ecological, and environmental issues, if you come from a community of 90,000 and it's the biggest community in your state, and the state's as big as California. So its allowed me to go to places like the Central Valley of Arizona and leave my biases at the state line and sit down and try to understand what they're dealing with in Phoenix and . . .

END OF SIDE 1, TAPE 3. FEBRUARY 6, 1998.

BEGINNING OF SIDE 2, TAPE 3. FEBRUARY 6, 1998.

Glaser: For five years it was one of the messages that I carried around in all the speeches that I gave, was to try to instill in other people the understanding that our values—our values—have very

⁴¹ "The Crane Trust, Inc. is a non-profit organization devoted to the protection and enhancement of habitats for whooping cranes, sandhill cranes and other migratory birds along the Big Bend Region of the Platte River Valley in Nebraska," www.cranetrust.org (Accessed June 2014).

little meaning in these new situations. Now, that doesn't mean that I'm a chameleon and if I move from Billings to Denver now, I'd adopt all the values of my community. I still have my values from when I lived in the suburbs of Billings, rural to town. But when I come to Denver, I try to understand the nature and culture of my community and the issues they're wrestling with, and become part of this community and not come in here trying to think that I can make Denver be like Huntley Project.

Back to your question about these people coming into the New West, as you called it, and their criticism of the past, my own criticism of people coming into areas like Denver or St. George or the West Slope, Grand Junction, is that they come in and they don't take the time to appreciate the value and the culture and the history of the community and respect the people who have perpetuated that. And don't try to lay their social biases immediately on top of what has been a community that functioned well enough to attract them, and yet, ironically, they want to change it immediately to replicate the biases they bring with them.

That's my worry for this rapidly changing West, is that people come in with so many of their own biases that they got out of major urban centers and with their own good intentions, they will ruin what they came for. Man has had a history of doing that, and then leaving it for the next area. I don't want to see that be the result of this changing period we're coming into. You know, as much as the West has changed in the last hundred years, right now we're entering the era of greatest change, as a matter of demographics, that we've ever experienced. That's just hard to imagine. I've seen L-A grow. I've seen the Front Range grow. I was stationed here in 1966, and I've seen the change in thirty years, and it's hard for me to imagine the next thirty years is going to change exponentially more than the last thirty years, but that's what all the studies say.

The people coming in, my hope for them will be that they appreciate the culture, the values, and the opinions of the community, because it's the community they came to and these people have perpetuated that community over time. That's not human nature, and so I worry that we have good processes to deal with that. As a federal institution, we get criticized for coming into an area and trying to impose federal solutions in a community, and I think that criticism is warranted. As a federal institution, I wanted Reclamation to come into a community and help them solve their problems, respecting their opinions, their cultures, their desires and still meeting the obligations of federal law. We're getting better at that. Twenty-five years ago, we were not good at that at all. We're getting better at that today.

Storey: Is that when you first came to Reclamation?

Glaser: Twenty-five years ago, yes.

Storey: Well, I'd like to keep going, but you've raised a lot of issues today. So I guess we'd better end and let you go. I'd like to ask you whether you're willing for the information on these tapes and the resulting transcripts to be used by researchers.

Glaser: Well, I told you last time and I'll tell you this time, anything I say here I would say in front of a room full of people, but I would also add this caveat, because I believe strongly about certain things doesn't mean I believe I'm necessarily right. It just meant that to date my experiences

have led me to believe these things. Like I said, my opinion's always maturing. I feel a lot differently today about issues than I did four years ago because I've had an opportunity to work at B-L-M and then step back and work on the commission. And as I go forward in life and I start doing work with individual users, I'm sure that I will gain an empathy for them that I don't have today because I've never walked in their shoes. As much as I tried to understand their concerns and their needs, I've never had to live their concerns and their needs. So I hope that my attitudes continue to mature. But, as always, they're fairly strong. I have very strongly held opinions, like a lot of people. But that's what this is. This is merely opinion based on my own history, my own experiences.

Storey: Thank you very much.

END OF SIDE 2, TAPE 3. FEBRUARY 9, 1998.

BEGINNING OF SIDE 1, TAPE 1. MARCH 20, 2009.

Storey: This is Brit Allan Storey, senior historian of the Bureau of Reclamation interviewing Donald R. Glaser, the regional director of the Bureau of Reclamation in Sacramento, California, on March 20, 2009. This is tape one.

Well Don, the last time we talked you told me about why you retired and everything. I'm wondering what you did after you retired and how you ended up back at Reclamation?

Glaser: Well Brit, that takes us back quite a while. I actually left Reclamation in 1994. (Storey: Uhm-hmm.) So, that was nearly fifteen years ago.

Taking a Sabbatical

Storey: Yeah. I think our last interview was in '98, maybe, or '96.

Glaser: Ninety-six. From here of course, from Reclamation, I went to the Bureau of Land Management as the state director. I just wanted to do something different.

Storey: And, I think we talked about, you know, the grazing issue and that kind of thing in the last interview.

Glaser: Well I ultimately retired from the federal government, from B-L-M [Bureau of Land Management], and that was in 1996, in September, and I was still a relatively young guy at that time, you know. I was in my middle to late forties. I was forty-seven or forty-eight years old and I never really intended to work for the government, so I wanted to go do some things on the outside of government. And I was offered a job as the executive director to the Presidential Commission on Western Water Policy. And, that was like having a two and a half year sabbatical in water, because it's a very academic exercise working with scholars in the area of water policy and working with members of Congress and the public on the Commission to produce the report *Water in the 21st Century*. And, that was a very rewarding thing. Like I said, it was just like being paid to go back and get an advanced degree or to take a sabbatical to work on water policy as an academic exercise, (Storey: Uhm-hmm.) as opposed to, as a practical exercise like we do in Reclamation, and that was

really good for me.

It gave me a different perspective on water. We finished the report in '98 or so and I decided to consult for a few years. I thought, my thought process was I could go out and help people solve their problems with water, maybe give them a different perspective on how they could solve their problems, and help them identify the path of least resistance to the outcome they were looking for. And, it was easy to get clients and the clients were interesting. The issues were interesting. The work wasn't very rewarding, because you were always outside of the process. That's the nature of consulting. For the most part, you're not an integral part of the team. (Storey: Uhm-hmm.) You're an appendage to the team. And the really interesting work, to me, is done as part of the activity, whatever it is. So, then I made a sort of a left turn and spent seven years doing nonprofit work, working for 501(c)(3) not-for-profit corporations. And, I spent three years with the National Fish and Wildlife Foundation in various capacities. I spent two and a half or three years with a local land trust doing conservation easements, (Storey: Uhm-hmm.) preserving open-space lands. And, I spent a year with the Colorado Foundation for Water Education, which was focused on providing unbiased information regarding water issues in Colorado, and it was rewarding in that it was maybe a way to give back.

It's . . . it wasn't as satisfying as I thought it was going to be. I thought it would enrich my life a little more than it did, but it was—because not-for-profits are always struggling for funding, so much of what you did was focused on raising money (Storey: Uhm-hmm.) as opposed to providing whatever philosophical public purpose the nonprofit was set up to carry out. And fundraising, unless you're into that, it's a task. (Laugh) Its something that you plan for and you go about systematically if you're going to be successful. And so, after seven years of working for nonprofits I had satisfied my doing something that wasn't for material gain or driven by high public standing. You just went and tried to meet a public need. Very hands-on type of work. (Storey: Uhm-hmm.)

Returning to Reclamation

So, after seven years with nonprofits I was trying to figure out what I was going to do with the rest of my life and something quite serendipitous happened. Some water interests in the South Denver area that were struggling with water supply asked me if I'd help them try to figure out a strategy for developing their water to meet their long-term water needs. This is municipal water supply. And, one of the things they needed to do was have a conversation with Reclamation, and so I was going to set up a meeting with them with the regional director from the Great Plains Region and the area manager from Loveland, and the easiest way for us to do that was to go to Colorado River Water Users, December of 2007 it probably was, to meet there, because they were all going to be there. And while we were there I was going to be able to introduce them to some other people that they should probably get to know, both inside and outside the government. And, I'd read my ticket wrong. And, like I said, very serendipitous. I'd read my ticket wrong and I had the arrival time as my departure time. So, when I showed up at Denver International Airport with my baggage and went to curbside check I was going to check my bag and the guy says, "No, we can't check your bag. Your plane's leaving in five minutes." And I said, "Oh no, I'm like an hour early." And they said, "No, your plane's leaving in five minutes." And I looked at my ticket and sure enough my plane was

leaving in five minutes. Well, I didn't make that plane at D-I-A [Denver International Airport], so I had to fly standby on the next flight. So, I'm waiting in the area and of course everybody from Denver is going to Colorado River Water Users. So, waiting in the waiting area there's like a reunion. Everybody in water's there, and both inside and outside of government, and I'm waiting to be called to standby, and they're filling standby seats, and they're filling standby seats, and then they announce that the last standby seat was going to go to me. Called my name and I go up there for the last standby seat and I get on the airplane. Of course, there's only one seat left, right next to Bob Johnson, the commissioner of Reclamation.⁴² (Storey: Uhm-hmm.) So, what's the odds? (Laugh) Totally astronomical. (Storey: Yeah.)

So, I've known Bob for twenty-five years, and we'd worked on a lot of things together, and we visited a little bit about Reclamation and our careers. I had a great career in Reclamation and fortunate beyond all reasonable expectation. And he too, you know, we just, we felt very fortunate in how the organization treated us and the things that we got to do. So, Bob's asking me what I'm doing and I'm telling him I'm filling time while I'm trying to figure out really what I'd do with my last job. I figured I had one good last job in me. And, he was interested in what that job, what that job might be if I could choose the kind of job I was looking for. And, I told him I wanted something that was meaningful, and challenging, and important, and would draw on my skills, because I had been—and my knowledge, and maybe my seasoned judgment. And, I hadn't quite figured that out yet. I had been offered quite a few jobs and none of them really interested me. They were just another job. And, that was it.

Went to Water Users and did my business and went home. And, I was sitting at home March of 2008 or so and it was really quite late in the evening, eight or nine o'clock, so it was really late in Washington, and I got a call from Karl Wirkus, the deputy, and he said, "The commissioner asked me to call and he had one question and that is, is there any conditions under which you might think about coming back and being the regional director in the Mid-Pacific Region?" And, catching me off guard and not having much time to think of it, and before I restrained myself, I said, "Maybe." And he said, "Well, then why don't you wait. The commissioner's going to give you a call and you guys need to get together and visit." They'd been trying to fill the job. It's a very difficult job, very difficult job, and its politically difficult. A lot of members of the delegation out there. The water situation is just incredibly difficult. The endangered species issues are getting more difficult every week, diminishing the water supply. And they knew they needed somebody that could just sort of stand up to that kind of pressure everyday. Not that a person had to be particularly smart, they just had to be seasoned enough and skilled enough that you could separate yourself from the pressure of the position that you were in. And, because of the turnover sort of at the top of Reclamation they didn't have people that had been around a long time (Storey: Uhm-hmm.) who had a certain set of skills that already weren't committed to something really important. A few interviews later—and I had to go ask my wife, by the way, who's a teacher and was having a really nice career here, whether she thought there was any conditions under which we could make this work. And, she said, "Well, only if she was able to leave teaching." And, I told her that was her decision. And, after she thought about it a little bit and we visited she actually decided she could support this decision if this was really what I needed to do. The hardest thing is, I have three children and five grandchildren. All of my children and grandchildren live in Denver,

⁴² Robert Johnson joined the Bureau of Reclamation in 1975 and became regional director of the Lower Colorado Region from 1995 to 2006, before becoming commissioner from 2006 to 2009.

(Storey: Uhm-hmm.) and so moving to California, for my wife and I, we're very family focused, she even more than me, that was probably really the most difficult aspect of this.

Storey: And being out of teaching too?

Glaser: Yeah. She was ready for—she'd had a good career, and the teaching industry is changing now. Its like a lot of government enterprises. Its becoming less about what you do and more about all of the measurements, and tests, and (Storey: Uhm-hmm.) you know. So, teaching now is more about testing than it is about, and documentation, more than about teaching and instruction. And I think for most teachers its becoming less fun, less enriching and rewarding, and I think she was feeling that. (Storey: Yeah.) So, it just seemed to be a good time. So, within a period of a month or so we'd come to an understanding, not much of an understanding, I'm a re-employed annuitant. (Storey: Uhm-hmm.) That's financially not the best deal in the world. They pay you the difference between your retirement and the pay scale. That's what you get paid to do the job. But, its not about money. If it was about money I would take a consulting job and make a lot of money. This is about doing something that's really important. (Storey: Uhm-hmm.) And, I missed Reclamation, the institution and the people that I worked with. This is a great organization, great heritage, exceptional employees, great, great tradition.

Storey: But, you've been away now . . .

Glaser: And I just, it was an opportunity to come back and take on one of the most difficult functions, and to be associated with an organization that treated me incredibly well. And, after a break and coming back at the age that I am its really hard for them, hard for individuals to put political pressure on me, because I was pretty happy doing what I was doing (Storey: Uhm-hmm.) and the worse that happens to me is they send me home, you know. So, I am free to try to do the very best I can for the public that we serve, and I was hired back sort of on those terms. I told them that if they just wanted somebody who was going to take up space in the office and sort of keep things moving, they ought to go find somebody else. If they wanted to find somebody who was really going to engage the water issues in Nevada, and Southern Oregon, and the Central Valley Project, that I was happy to try to do that. And fortunately, I have the Newlands Project, which of course I came in right after the first canal failure, and we had a second canal failure the month after I showed up. We have Klamath.

Storey: That would be the big one at Fernley?

Glaser: Yes. (Storey: Yeah.) The one, that was the one before I showed up. And then the B-Line Canal, which is also a large canal, failed in June (Storey: Oh, yeah.) of last year. (Storey: Okay.) And then, of course, we have the Klamath Project and its recent, the recent issues associated with that over the last decade, starting with when they shut the project down. (Storey: Uhm-hmm.) And then, of course, the Central Valley Project with all the Delta issues and all the endangered species issues, and growth issues in California, and the changing nature of agriculture out there. (Storey: Yeah.) So, they're challenging projects. It's a, they haven't let me down.

Storey: Uhm-hmm. Well, it was about sixteen years you were gone?

Glaser: From Reclamation, (Storey: Yeah.) from '94 until now, so fifteen years.

Storey: About fifteen years?

Glaser: Fifteen years this June since I left.

Storey: Did you see any changes in Reclamation, when you came back?

Reclamation is Better

Glaser: Yes. Reclamation is a different organization today than it was fifteen years ago, and for the most part better. We went through a really difficult time from the mid '70s to the mid '90s. That was a difficult time in Reclamation's history, starting with the Energy Act that established the Department of Energy and cleaved Western Area Power Administration out of our Power Division. Because, power marketing and transmission, that used to be our function. So Western, which is now a bureau within the Department of Energy, was a division within the Bureau of Reclamation, and that was difficult for us. We lost a lot of employees. And, you just can't separate an organization like that without it having lasting effects on the organization. And, we devalued the role of energy within Reclamation at that time. Reclamation was a world-recognized energy utility prior to that, and Western sort of took that persona with them, along with a thousand of our employees. (Storey: Uhm-hmm.) And so, that was just a very disruptive thing, and Reclamation projects are financially-integrated projects. So when they took that function over to the Department of Energy, they couldn't separate the fact that our finance, our projects are financially integrated between power and water. And so, that's why we have such a close relationship with Western today, but its different because they went to another department. That was very disruptive to us and it took away from one of our premier visible public programs.

And, right on the heels of that we went through President Carter's "hit list" where they challenged major construction, as we understood it, and challenged seven of our ongoing projects, and ultimately killed five of them and reformulated two of them. They reformulated Central Arizona Project and the Central Utah Project, and ultimately completed those. But five of them, like Oahe, and Garrison, and Narrows, and O'Neal, those just never were built as they were, as they were configured. (Storey: Uhm-hmm.) And so, that was the beginning of the end of Reclamation as a, a large civil works organization that was focused on construction. So, we wandered around for about fifteen years trying to find an identity, changed our name to Western, to (Storey: Uhm-hmm. Briefly.) Water and Power Resources Service, WPRS, and then changed our name back (Storey: Uhm-hmm.) because folks thought it was about the name and not sort of the integrity of our program, and sort of a self-identification. So, we kind of wandered through a twenty-year period and we reorganized, and then we reorganized again. We moved Washington to Denver in the mid '80s and that was really disruptive to us politically. And then, we had Dan Beard come in as commissioner and decentralize things to the area office and sort of disrupt us as a matter of policy. Took one more step at sort of decommissioning us as a construction agency and disrupted our planning processes, figuring if you aren't planning new projects you won't build anything, I believe, probably was the take on that.

I just saw a different agency. I saw a resource management agency as opposed to a civil works agency. (Storey: Uhm-hmm.) And, we just lost our identity through there, and it was hard. It was. We came to Denver and did away with the assistant commissioner for engineering and research, and the chief engineer's position that existed seventy-five years, and replaced that with the Technical Service Center, which is an A&E [Architectural and Engineering] type of a service, (Storey: Uhm-hmm.) very consulting in nature. And so, all the way through that, and that's about the time I was leaving. I think that we never did find our identity and we had a little bit of internal anger and frustration, and I think it was a hard time for us. (Storey: Yeah.) And, I think Eluid Martinez⁴³ isn't given enough credit as commissioner for helping the Bureau start to find itself. He started focusing on that when he was commissioner. Most of the credit goes to John Keys⁴⁴ for sort of bringing Reclamation back to a level where we respected ourselves and then started to gain respect within the industry. But yeah, its different today. The organization has a little better sense of who they are and what their role is in the future. Its not, we're not near as confident as we should be about our role. We remain an incredible influence on the West and play just a tremendous role in the daily life of the people who live in the western United States, and the job's so much more difficult today, Brit. The job is harder today, I think, than it has ever been.

Storey: Let's see . . .

Glaser: Less money. More focus on business practices. (Storey: Yeah.) A little bit more process oriented and a little less results oriented. It's a difficult time. There's a real focus on process in government now, and I don't say that's a bad thing. But, it can become a bad thing if it gets in the way of carrying out your public service. Because, we're not here to run processes. We're here to provide the public with a genuinely needed public service, and right now process is getting in the way of function, and that's a little sad. So, we still have a ways to go.

Storey: What kind of processes are we talking about?

"Process is Getting in the Way of Function"

Glaser: All kinds of processes. For a while—and I'll just go through a few as I see them. And, keep in mind, you know, what do I know? I've been back just about a year. And so, its even kind of egotistical to think I talk authoritatively on this, but I do have a perspective because I was here then and now I'm back now, and I think it gives me a different vantage point. Because, if you're here everyday you don't notice the change.

Storey: That's right. You don't.

⁴³ Eluid Martinez was the first Hispanic American to become the commissioner of the Bureau of Reclamation and served under the Clinton administration from 1995 to 2001. For more information see, Eluid Martinez, *Oral History Interview*, Transcript of tape-recorded Bureau of Reclamation Oral History Interviews conducted by Brit Allan Storey, senior historian, Bureau of Reclamation, during 1996 to 2001, in Washington, D.C. and Santa Fe, New Mexico, edited by Brit Allan Storey, 2006, www.usbr.gov/history/oralhist.html.

⁴⁴ John W. Keys III had a long and distinguished career with the Bureau of Reclamation and served as commissioner from 2001 to 2006. For more information, see John W. Keys III, *Oral History Interview*, Transcript of tape-recorded Bureau of Reclamation Oral History Interviews conducted by Brit Allan Storey, senior historian, Bureau of Reclamation, from 1994 to 2006, in Denver, Colorado; Boise, Idaho; Washington, D.C.; and Moab, Utah, edited by Brit Allan Storey, 2008, www.usbr.gov/history/oralhist.html.

Glaser: You don't see the change when it—because, it changes on the margin. It changes by increment. But, if you're gone a while and you come back then it's really more apparent, I think. Accountability is the watchword today and they've passed any number of laws trying to get their arms around a problem that I think doesn't exist. What will happen is there will be an exposé of some entity in government. It'll be anecdotal, whether it's \$1,400 toilet seats in the military or \$600 hammers, you know. Somebody will get something in their head and it'll become an anecdotal story, (Storey: Uhm-hmm.) and then that gets attributed to all of government, and that's just nonsense. Reclamation has always been very business-like. It's a utility, so we're very business-like in our practices. But because they identify some problem some place, then they change the very nature of government to try to solve an individual problem by changing the processes for all of government. And, I think it is sort of the nature of democratic processes and representative government like we have now where Congress, state legislatures and the national Congress need to do things when things are exposed, (Storey: Uhm-hmm.) and their solutions are often not elegant. What they are is they're just very broad, sweeping change that then we have to figure out what to do with. And so, I'm not at all opposed to accountability. I think we absolutely need to be held accountable for the expenditure of the funds and the actions that we take on behalf of the American public. I absolutely believe in that. I have from the day I walked through the door.

I started at I-R-S [Internal Revenue Service] so I assessed tax in the beginning. I know where the money comes from we spend. It comes from individual farmers in Ekalaka, Montana. (Storey: Uhm-hmm.) I've been there. I assessed tax. So, I have a real sense of responsibility and accountability, but I don't believe that a Congress can figure out how to implement a program that crosses the breadth of institutions that we have within the federal government in that you can come up with one model that fits every need, and because of that it minimizes our effectiveness. Probably all of us. And, administrations come in and they have their idea of how we, both of how we perform historically and how we should be held accountable. And again, organizations like the Office of Management and Budget, whose role I respect immensely, they try to find a solution at O-M-B [Office of Management and Budget] and apply it to all of government, and we're a different organization than B-L-M. I worked at B-L-M, as an executive, and how they do business is fundamentally different, because of their program, than how we do business. So, when they lay these certain accountability-type programs on top of us they don't fit well, and because of that it makes it very difficult to get our job done. They tighten down—to be more specific, right now there's a tendency, there is a tendency to tighten down procurement processes more and more each year, and it's hard to even keep up with the changes in the requirements of procurement, and to get through procurement before there is a new procurement requirement that's laid on top of it.

And, Lake Berryessa is a little bit that way. We went through a three-year process of developing a solicitation that we put out for new concessions at Lake Berryessa, reviewed by every level in the Department, (Storey: Uhm-hmm.) and we put the solicitations out, we award one contract, we're getting ready to award five more, and the one that was awarded went through a full level of review right up to and through the Department before I signed it, and then a new attorney looks at it and says, "Well, yeah, but this singular provision, this isn't legal." And then there's a big debate on its legality and in the end they determine legal sufficiency, and three years of work and service to the public is lost because we have to go back and do it again. It costs political energy. Because, this is disruptive in the community.

(Storey: Uhm-hmm.) Its disrupting the county. They've bonded. They've passed bond levies and bonded money to put in new water treatment facilities out there to meet national standards, and we were going to support their bonding. When we cancel the contracts then it disrupts their financing within the county. It has a ripple effect when something like that happens. Something as simple as a concession contract. So, doing work is just becoming very, very difficult. And, there is a point that we have to stop doing that or we just become dysfunctional as a government, and in some areas we're approaching those points (Storey: Uhm-hmm.) where it becomes so difficult to get the job done, we eat up so much resource, human and financial, getting through the process that the next criticism's going to be how inefficient we are. And its not an inefficiency we created. And, that's a worrisome thing to me. It's a trend I see right now. And, our focus in the Region has been, we control what's in our control. There's a thousand employees out there and if we focus all of our energies toward the most effective organizational processes and public outcomes then within the system we will get as much done as we can get done, (Storey: Uhm-hmm.) because that's what's within our control. Now, it sounds easy to tell a thousand people, "Why don't we all just . . ."

END OF SIDE 1, TAPE 1. MARCH 20, 2009.

BEGINNING OF SIDE 2, TAPE 1. MARCH 20, 2009.

Glaser: You know, it really . . .

Storey: It sounds easy? (Laugh)

Glaser: Yeah, it sounds easy to say, you know, "Why don't we all commit to the same direction and all commit to internal efficiency within our own organization to carry out our public responsibilities." That sounds like an easy thing to do, incredibly difficult. Its taken twenty or thirty years for us to sort of get to where we are, and there's a lot of internal dis-efficiencies, a lot of natural and unnatural tension between levels of the organization, whether it's the area manager and the Regional Office, or whether it's the Regional Office and Denver, there are these tensions that are present and we actually will work at cross purposes to each other, within the Region and between, within the Bureau of Reclamation. And, if we're going to survive in the future with diminishing budgets and a more difficult program we have to become more efficient. We can't afford to expend any energy internally fighting each other.

"There Are Some Natural Tensions"

Now, there are some natural tensions, because people in the field have this thought, you know, people in the field, in the Area Office, they want to do things right but their emphasis is on "to do." They're the action people in the organization. People in the Regional Office, they want to do things right. Their action, their focus is on "right." They're the qualitative people. Now, they're both committed to doing things right, but one's committed on the action, the other one's responsible for the qualitative aspect of it, and there's a tension there and that's a healthy tension. But, if we don't manage it, it can become an unhealthy tension where it becomes a force of wills. (Storey: Uhm-hmm.) The field manager is going to get it done in spite of the people in the Regional Office or Denver that say, "You can't do it that way." And, the people in Denver, or the Regional Office are going to say, "I'm not going to let you get that done unless you do it this way." And when we get to that point, this test of wills,

then it becomes an inefficiency that we can't tolerate, and we need to get to where we do right things the right way, and that's what we're committed to. But changing ten or fifteen years of relationships, because we're talking about humans now and humans are funny critters, (Laugh) (Storey: Yes, they are.) and they don't change easily, and the longer things have been a certain way the harder it is to change.

Storey: I think others have also talked about the fact, "Well, all those people in those other offices don't do anything and they're all overpaid." (Laughter)

Glaser: Uhm-hmm. At every level people believe that. (Storey: Yeah.) I've tried to address that a little bit by bringing people in from—right now my, the deputy is vacant, deputy regional director is vacant in our Region, so the two people that have filled in since John Davis retired have both been deputy area managers. Will Schipp who now works in Denver, filled in first, and now Rick Johnson from Folsom. And, the next person that's going to fill in is Richard Welsh from Willows. And, the reason I'm having these people from the field come fill in, its very instructive to them, very enlightening to see what it is we do (Storey: Uhm-hmm.) everyday, because they've spent their whole careers at the field. They've never worked at a policy level. And so, for them to see what we do everyday is illuminating. (Storey: Yeah.) And so, we try to do the same thing. The new area manager in Klamath came out of the Regional Office, and they'll go to the Klamath Office now with a new responsibility but a respect for what's done in the Regional Office and a knowledge of the capability that exists here. (Storey: Uhm-hmm.) And so, what we need to do—and moving people around for the sake of moving people around, I don't subscribe to that. Its very disruptive. Organizational change for the sake of organizational change is really disruptive.

This is about doing things differently within the structure that we have. Because its easiest to redraw the boxes. Most people who come in at the top want to redraw the boxes because they can put their fingerprint on the organization and its something they can get accomplished in the time they're there. (Storey: Yeah.) Look how many commissioners have reinvented Reclamation (Storey: Uhm-hmm.) and written some report based on some study that resulted in their shape of the organization, but doesn't change the culture. It just disrupts us for a while, and we keep doing what we've always done in different boxes. And so, this is about trying to change us culturally and trying to better inform us and helping us understand we're all part of the same team. The assistant regional director for Business Services, Katherine Thompson, I have made her accountable for her relationship with Denver, because we can't function in Business Services without a relationship with Liz Harrison and her people. (Storey: Uhm-hmm.) And more than that, in procurements the warrants come down through Liz's shop, not through me, for the contracting officers. Their warrant comes down from the Department to Liz's shop to my contracting officer. They must have a relationship if we're going to be successful. (Storey: Yeah.) And, until I go tell the manager in my own organization, "Its now your responsibility to develop that relationship. I don't care what it takes. You just go do that." Then it takes away their ability to say, "Well, its Denver's fault." Its not Denver's fault. Its her fault if she doesn't have a relationship that can help her carry things through the rest of the organization. (Storey: Uhm-hmm.) You have to give them the accountability that goes with the responsibility, and you have to be really clear on the expectations of them, and we're working on that right now.

We talk about that constantly every week in our organizational meetings. You know, "How do we get more efficient? How do we work on these relationships? Where are our problem areas? What's our priority? What do we need to fix this week?" Because, you can't fix everything at once. When I came through the door it was clear our procurement process was struggling a little bit. That didn't mean the Procurement Division was ineffective, because the procurement process is a very long process. It starts clear back with the planning process when you're formulating what your plan is and then doing your preliminary designs and putting your specs together. Procurement has nothing to do with that. That's all prerequisites to getting it done and getting NEPA [National Environmental Policy Act] compliance and having your consultation for endangered species under the Endangered Species Act.

You have to get all those things done before you can solicit and award a contract. Well, we didn't pay much attention to all of the prerequisites and then we'd have these emergencies come up and we're trying to cram everything on a very short time line. You can do that, as an exception, but you can't do that as a rule, and we were doing it as a rule. So, we had to just break our practices and develop more effective practices. So, you just pick what's most important. You work on that. (Laugh) When you get that one solved you pick the next most important, the thing that's most broken, getting in the way of getting it, fix that, and then you just keep working your way through the organization. And, it's sort of like being gone fifteen years. You wake up one day and you look back and you go, "You know, Brit, it's a little better than it was before." (Storey: Uhm-hmm.) Because, you'll never see—it's like losing weight. From day to day that scale doesn't change, (Laugh) but if you just stay after it lo and behold one day you look at that and you go, "My clothes are looser and the scale says less. How did that happen?" Organizations are sort of the same way. (Storey: Uhm-hmm.) It's our challenge for the future for Reclamation, diminishing budgets and more difficult responsibilities, but that's what makes it fun. (Storey: Yeah.) That's why I came back.

Storey: Well, you've talked about Berryessa. What other issues?

Glaser: Oh, it's a great Region.

Storey: Did you walk in on?

Issues in the Region

Glaser: It's a great Region that I'm affiliated with, that I have the great honor to lead. Sometimes—we have three basic projects and then some smaller ones. We have the Central Valley Project in California. We have the Klamath Project in southern Oregon, and we have the Newlands Project on the Truckee River, Truckee and Carson rivers in Nevada,⁴⁵ and all of them are very, they have really interesting histories.

The Newlands Project, of course, being one of the very first Reclamation projects—they'll claim to be the first along with four or five other projects, but certainly one of

⁴⁵ For more information on major projects within the Mid-Pacific Region, see Eric A. Stene, "Central Valley Project: Overview," Denver: Bureau of Reclamation, n.d.; Stene, "Klamath Project," Denver: Bureau of Reclamation, 1994; Wm. Joe Simonds, "The Newlands Project," Denver: Bureau of Reclamation, 1996, www.usbr.gov/history/projhist.html.

the first half a dozen projects that we're authorized for construction and actually constructed. Hundred-year-old facilities, a hundred years of history, (Storey: Uhm-hmm.) a hundred years of history within the community. Some animosities between the Pyramid Lake Paiute Tribe on the Truckee River and the Truckee Carson Irrigation District, people who grew up in small communities together not as friends, and that is carried into a hundred years of history and that animosity is there yet today. Thirty years of litigation and, of course, Senator [Harry] Reid,⁴⁶ who's the Majority Leader in the Senate, comes from there, very focused on that area. So, the politics is of a different magnitude, very, very personally invested in what happens on the Truckee and Carson rivers. Passed the Pyramid Lake Settlement Act in 1991, part of which was to develop a new Truckee River Operating Agreement.⁴⁷ We signed that this last September, seventeen years later. (Storey: Uhm-hmm.) It took seventeen years to negotiate the new Truckee River Operating Agreement, and Truckee Carson Irrigation District, the largest single appropriator on the river didn't sign it. So, seventeen years and you weren't fully successful, and Truckee Carson Irrigation District has said, "We're going to try to block the implementation of TROA," Truckee River Operating Agreement, in every form that presents itself. So, the animosity continues to build, and it would be nice if we could break that cycle.

In fact, I'm working on that right now to see if we can negotiate. I met with the parties to TROA two days ago to talk about conversations we're having with Truckee Carson Irrigation District to see if there's a way that they don't have to block the implementation of TROA and maybe can become signatory to it. Now, the TROA parties they're not real optimistic that one party can pull that off, nor do they think its maybe even appropriate that the federal government is having a discussion about something that may affect their agreement. And so, there are real sensitivities there. People have worked on this twenty-five years on the new agreement in some form, even before the legislation. So, you have to be hypersensitive to their standing. They've invested their whole adult lives in this and they live there. And so, for me this sort of Johnny-come-lately guy they don't even know, to be having conversations to try to address what they couldn't do, it's a real sensitivity. So, and it's a changing time for Truckee Carson Irrigation District. I think financially they're right on the edge of solvency. They spent so much money litigating that its hard for them to maintain the facilities, and we saw what happened this last year. We had two major canals fail. One of them inundated hundreds of homes and businesses, and that's something that reflects on Reclamation and it reflects on

⁴⁶ U.S. Senator Harry Reid participated in Reclamation's oral history program. See Harry Reid, *Oral History Interview*, Transcript of tape-recorded Bureau of Reclamation Oral History Interview, conducted by Donald B. Seney, edited by Donald B. Seney and further edited and desktop published by Brit Allan Storey, senior historian, Bureau of Reclamation, 2013, www.usbr.gov/history/oralhist.html.

⁴⁷ Public Law 101-618 became law on November 16, 1990. The law contains two acts: The Fallon Paiute-Shoshone Tribal Settlement Act and the Truckee-Carson-Pyramid Lake Water Rights Settlement Act. The main topics of the legislation are:

- Fallon Paiute-Shoshone Tribal Settlement Act
- Interstate allocation of waters of the Truckee and Carson rivers.
- Negotiation of a new Truckee River Operating Agreement (TROA)
- Water rights purchase program is authorized for the Lahontan Valley wetlands, with the intent of sustaining an average of about 25,000 acres of wetlands.
- Recovery program is to be developed for the Pyramid Lake cui-ui and Lahontan cutthroat trout
- The Newlands Project is re-authorized to serve additional purposes, including recreation, fish and wildlife, and municipal water supply for Churchill and Lyon Counties. A project efficiency study is required
- Contingencies are placed on the effective date of the legislation and various parties to the settlement are required to dismiss specified litigation.

Source is: http://www.usbr.gov/mp/lbao/public_law_101-618.html (Accessed December 2011)

them and the community. And that's unacceptable, and it's an issue that we need to address. And, Truckee Carson Irrigation District was indicted on federal charges as an organization. Their general manager and three employees were indicted for falsifying records to the United States for the purpose of appropriating federal resources to the district's use, conspiracy charges. Very upsetting, and we're trying to manage a project in the middle of all this, Brit, which is very difficult. (Storey: Uhm-hmm.)

And then you have the Klamath and its about in the same place, a very old project. Again, a hundred years old, hundred-year-old facilities, and everyone knows that eight years ago the project was shut down, made international news, tensions were extremely high to the point of guns, armed guards on behalf of the federal government at our headworks that were chained so that they didn't cut the chains and open the headworks. Since that time, we have endangered species there. We have tribal interests there. We've been able to renegotiate with the Fish and Wildlife Service a new biological opinion for the resident sucker species that are threatened and endangered, but we've been unsuccessful in doing the same thing with National Marine Fisheries Service for salmon, coho. Just are unable to get through the consultation, and we're going to have to go back and tell the judge we're not able to do that, or we're going to have to have an epiphany between these two federal agencies that help us resolve our fundamental differences of opinion about the biology and our obligation under the law.

And then you lay on top of that the tribal interests and having to work with tribal interests above Klamath Lake and below Klamath Lake on the river, and those interests aren't the same, and there's fighting between the respective tribes, particularly the Yurock and the Hoopa Valley tribe, that are adjoining tribes on the river. And then we just signed an Agreement in Principle to remove four private dams that are below our project, that are owned by Pacific Corp right now, and so we're going to be looking at whether or not the federal government should assume that liability for the removal of those dams for certain conditions in an agreement that involves California, Oregon, all the tribes, other interests including commercial fishing interests for salmon, the water users, and we have to see if we can—Secretary [Dirk] Kempthorne signed that Agreement in Principle a few months ago, before he was leaving office, and the new administration has to decide whether they're going to embrace that Agreement in Principle, which I think they probably will, because it has a right feel, but exceedingly difficult. So. So that one sort of has a future that, if we can pull it off, has a happy ending a quarter century from now. But, we're on the front end. It's like the new Reclamation. We're on the front end of working on something there that we won't see for twenty-five years, but we have to start today if we're going to change the way that that project's going.

Storey: If it's ever going to happen?

Glaser: So. Then you have the C-V-P, the Central Valley Project, the most productive agricultural region in the world. It's incredible. It's so impressed me. I had my impressions of C-V-P, like everybody in Reclamation and in water before I came back to run the Region. But, I'm so impressed with the quality and volume of food that they produce in the Central Valley. It's unlike any other Reclamation project, by magnitudes. And, just to give you an example, truly ninety percent of all the almonds in the world are grown on the Central Valley Project with Central Valley Project waters, ninety percent of all the almonds in the world. I was reading in

the *Sacramento Bee* this last Saturday that there is a world-wide shortage of canning tomatoes, particularly in Europe. And the expectation was that the Central Valley would increase production of canning tomatoes by fifty percent this year over last year, because the price was up like twenty percent. And, we give them an allocation of zero water to the ag water service contractor south of the Delta, which is one of the prime canning tomato areas for row crops. And so, you have this huge world demand and we're going to have a substantial shortage. In the Central Valley, right now, what we have is an unsustainable water condition for the state and federal projects out there. What we have is a federal project that was built in the '40s and '50s, and then a state project laid right on top of it and parallel with it that was built in the '60s and '70s, (Storey: Uhm-hmm.) and between them their pumping in the Delta is not sustainable and we're really limited on how much water we can now pump in our state and federal projects. The problem is, since the last drought in the early '90s eight million more people have come to California, since the early '90s, eight million more residents, and of course they're dependent on water. And, since the early '90s there's been a conversion from maybe fifteen percent permanent crops and eighty-five percent row crops in the Central Valley to closer to forty-five percent or fifty percent permanent crops and fifty percent row crops. These are orchards and vineyards. And so before when we were a little water short, they would just fallow tomatoes, or cucumbers, or melons, or, at that time, cotton. You know, they grew cotton in the valley in the '90s.

Storey: Pima cotton?

Glaser: There is no Pima cotton in the valley today. Those are all permanent crops. So now when we get a shortage there's no water for orchards and vineyards, and they're out there cutting down almond orchards right now because they know there's, they know no matter what happens with the precip there's not adequate water to irrigate their orchards or their vineyards. And so, they've developed the groundwater and they're now pumping more groundwater in California, Central Valley, than anytime in the history of the valley. So, they're pumping more groundwater. The surface water is not adequate to meet municipal and industrial, and agricultural needs, and we have all these species that are in decline, maybe a dozen fish species that are all in decline, that are all listed. Its not sustainable. We have to find a more sustainable solution. The state's focused on their Bay Delta Conservation Planning Process.⁴⁸ They think if they solve the issues in the Delta then that becomes a foundation for solving the rest of the problems in the valley. Of course, a part of the Bay Delta Conservation Planning Process is the Peripheral Canal, now called the Isolated Facility or Out-of-Delta Conveyance, but is still the Peripheral Canal, same design, same alignment, same issues. Politically, they believe in the state that the tide is changing on the sentiment towards the canal, because truly people understand—even in the environmental community. The environmental community met with me this last week. People who I knew fifteen years ago would have been vehemently opposed to this now advocate the Peripheral Canal as part of the solution in the Delta. Same

⁴⁸ Referring to the delta of the San Joaquin and Sacramento rivers—often referred to as the Bay-Delta. This is located on the northeast quadrant of San Francisco Bay (San Pablo Bay). The water from the Delta exits to San Pablo Bay through the Carquinez Straits. "The Bay Delta Conservation Plan (BDCP) is a part of California's overall water management portfolio. It is being developed as a 50-year habitat conservation plan with the goals of restoring the Sacramento-San Joaquin Delta ecosystem and securing California water supplies. The BDCP would secure California's water supply by building new water delivery infrastructure and operating the system to improve the ecological health of the Delta. The BDCP also would restore or protect approximately 150,000 acres of habitat to address the Delta's environmental challenges." See baydeltaconservationplan.com (Accessed June 2014).

people. Same organizations. And, they just realized that without a Peripheral Canal, without conveyance around the Delta, that California's going to have to make a choice, the Delta or water south of the Delta. And, I think the environmental community, many of them have to be concerned that they'll pick water around the Delta and south of the Delta, because we're talking about a billion-dollar economy, billions of dollars and water for twenty-five million people. And, they know twenty-five million people, domestic water supplies, the Delta, I think they don't want that call to be made right now. So, the dynamic's really changing. Its—and so, in the next decade we're going to have a new direction for the projects in California, whatever that direction's going to be. Its interesting. Its interesting to watch.

Storey: Even if we get water in the Sierra [Nevada], which I guess is low this year, the Delta is still going to be sitting there as a bottleneck, isn't it?

Restrictions in the Delta

Glaser: It is a problem, because we have such restrictions in the Delta that go beyond just the delta smelt. You always hear about the delta smelt? (Storey: Uhm-hmm.) But the state just listed the longfin smelt, which has a similar habitat requirement, and in the Delta its had the same precipitous decline. There's not enough storage in California. Climate change, its hard to tell what climate change is going to do to the operation of the project. There's an estimation that the ocean will rise, and if the ocean rises, the Delta is a tidal system, so if the ocean rises then it takes more water to push the salt water from intruding into the Delta, because it comes in and out on the tide. (Storey: Uhm-hmm.) If the ocean goes up, there'll be more hydrologic pressure in the ocean and the salt water will move further into the Delta. And, the concern is, if they don't do something soon, you could have a situation where just a sea rise will push the saltwater back in and sever the conveyance between the Sacramento River and the pumps (Storey: Uhm-hmm.) and you will lose all that water, not to any action, but nature.

In addition to that, they have all these islands in the Delta. They really aren't islands. They're holes. Because, the islands were peat islands and they've been farmed over time and they've subsided. And so, you have these dredged dikes. They call them "levees," but a levee doesn't have water on it full-time. These are dikes, because they have water on them 24/7, fifty-two weeks a year, and that's because the islands have subsided because they're peat and peat gets farmed, and it erodes and compacts. So, the islands, the land has dropped. The levees have become dikes and now they're fifteen feet below the level of the Delta in some places. And, oh yeah, there's a fault that runs right through the Delta. The Delta outflows right at the Oakland Bay Bridge. You remember what happened to the Oakland Bay Bridge in the 1990s, during the World Series? It collapsed (Storey: Uhm-hmm.) in an earthquake. If that happens in the Delta, those islands will liquify, the dikes will, and if you have the catastrophic failure of a number of islands in the Delta, then you have these holes that will fill up with water, and if they fill up with water it will suck the ocean water into the Delta. And, you could have a seismic event and overnight sever the water through the state and federal pumps for six months, or a year, or a year and a half, until you can freshen it up or maybe, maybe permanently in the south Delta, its hard to say what'll happen. So, if they get an earthquake in the Delta it will cut off the state and federal projects permanently and immediately, (Storey: Hmm.) and it'll be catastrophic.

Storey: Yeah.

Glaser: It would make what happened in New Orleans economically sort of a blip. This is twenty-five million peoples' water supply. And, all the agriculture would be just lost instantaneously, what they're not serving with pumping off the Friant [Dam]. (Storey: Yeah.) So, that's what they're faced with right now. And in the state of California, particularly the governor has showed incredible leadership about holding this issue up and saying, "We have a catastrophic situation that we need to address." And, they're pressing really hard and we're partnering.

Storey: Yeah. He's been very vocal about it.

Glaser: Yeah. And, that is because it's an issue that no longer can be denied. Its been there, people have been aware of this for a long time.

Storey: I think it was Mike Cateno⁴⁹ once told me, "Peripheral Canal will be built." (Laugh)

Glaser: Uhm-hmm.

Storey: That was a long time ago, ten, twelve years ago.

Glaser: So, that's sort of the projects we have (Storey: Okay.) and some of the issues on the table.

Storey: How's Reclamation involved in the Peripheral Canal?

Peripheral Canal

Glaser: Well, the state has taken the lead on the Bay Delta Conservation Planning Process and a parallel process, which is called Delta Habitat Conservation and Conveyance Project, which really the Peripheral Canal part of this. So, they have two processes underway. One that's looking at a recovery plan for the Delta. That's an ecological recovery plan, which will include dealing with the islands, dealing with habitat for the species. The other one is a process that is looking for an alignment for the Peripheral Canal, and then all actions required to mitigate the affects of that canal, and they're going to marry these two things up in the future and that's going to be the plan. And they have to have all this in place, the plan in place, within the next year or eighteen months. To give you a magnitude, the size of the magnitude of this thing, the Delta Habitat Conservation and Conveyance part of this, the plan itself is \$140 million planning process. Just \$140 million to do the planning. And, so they're going to marry these things up and hopefully, they're hopeful that this will satisfy endangered species obligations under Section 10 of the Endangered Species Act, and that it will solve the majority of in-Delta issues: water quality, delta smelt, longfin smelt, habitat for other related species, migratory issues associated with salmon and steelhead. They're hoping it just solves or addresses all of those concerns. No minor deal. The governor's talking about a bond of \$9.2 billion for the Bay

⁴⁹Mike Catino was regional director of the Mid-Pacific Region from 1981 to 1983 and participated in Reclamation's oral history program, see Mike Catino, *Oral History Interviews*, Transcript of tape-recorded Bureau of Reclamation Oral History Interviews conducted by Brit Allan Storey, senior historian, Donald B. Seney, both of the Bureau of Reclamation, from 1994 to 1995, in Sacramento, California, edited by Brit Allan Storey, 2010, www.usbr.gov/history/oralhist.html.

Delta Conservation planning part of it to implement the infrastructure needs in the Delta to address the Delta needs, and the water users have said they'll put up the \$5 billion to build the Peripheral Canal. So, you're talking about a \$15 billion program. We participate on all the committees, because we're half of the conveyance in the Delta, and we participate on all the . .

END OF SIDE 2, TAPE 1. MARCH 20, 2009.

BEGINNING OF SIDE 1, TAPE 2. MARCH 20, 2009.

Storey: This is tape two of an interview by Brit Storey with Donald R. Glaser on March 20, 2009.

Glaser: We help fund the Delta Habitat Conservation and Conveyance planning process and we participate in that planning effort. And eventually if there is a Peripheral Canal built we will have to decide, it will be built by the water users or the state and we'll have to decide what portion of the conveyance we want to pay for. It will be a lot like San Luis Reservoir, you know. The federal government owns San Luis Reservoir,⁵⁰ (Storey: Right.) the state operates it, and we share the costs and the storage. It will be a lot like that. The state will probably own it. The state or a joint powers authority will probably operate it, and then we will pay for conveyance within the facility. But, we have to get through out planning process to determine, one, what portion of the canal capacity we want to contract for. Two, if its financially viable, you know, how do we pay for it, because we pay for everything through our rates. And, three, do we have the authority or do we need to seek the authority to participate in that? So, we're going through that process right now, in the eventuality that they actually get a plan that is supported and that all the agents, all the regulatory agencies can accept. And, so its dynamic. Its moving very quickly. Its consuming a good part of the industry in the state, water industry in the state, to keep that thing moving. (Storey: Uhm-hmm.) So.

Hydroelectric Generation Declining

One of our big issues that we face out there, Brit, that we don't think very much about is the Bureau of Reclamation is a significant contributor to the energy supply of California, through our hydroelectric generation, but our generating capacity is eroding. We generate less and less electricity every year in the absolute, and we require more and more for project power every year. So, its sort of exponential what's available for the preference customer to meet urban needs, and the cost of power has gone up substantially, our cost of generating power. Because, every time there's a new obligation in California that water users can't pay for, it becomes the burden of power. And so to give you an example, we have Red Bluff Diversion that's just south of Redding on the Sacramento River and it's a barrier to fish passage for endangered salmon and green sturgeon. So, we're going to have to take Red Bluff Diversion out of the river. The structure will probably stay. We'll just leave the gates open. Well, that's the diversion dam to Tehama Colusa Canal Authority and that's their only way to divert water out of the river, which is a water service contractor under the C-V-P. So, we're

⁵⁰ The San Luis Reservoir, referred to by the interviewee, is known as the B. F. Sisk Reservoir. The San Luis Unit is a federal /state project, supplying supplemental irrigation water to Central Valley Project customers in the southwest San Joaquin Valley and is also a key feature of the State of California Water Plan. For more information, see Robert Autobee, "San Luis Unit: West San Joaquin Division, Central Valley Project," Denver: Bureau of Reclamation, n.d., www.usbr.gov/history/projhist.html.

feverishly working to build a pumping plant that will pump 2,500 cubic feet per second out of the river and it has to be screened. Well, that pumping plant's going to cost \$200 million and its going to take substantial energy that the diversion dam didn't require. Because, now we're talking about pumping the water out of the river and screening it for fish, (Storey: Uhm-hmm.) as opposed to simply diverting it into canal headworks. There's no ability to pay within the Tehama Colusa Canal Authority. Its actually being built under, that facility is being built under the Central Valley Project Improvement Act. It was authorized under C-V-P-I-A [Central Valley Project Improvement Act]. And so, the project costs, the project has to pick up thirty-five percent of the cost. Water users can't pay for that, so the power users have to pay for it. So, we're building a facility that the power users are going to pay thirty-five percent of the cost of, so that's \$70 million, and on top of that the energy that is now going to the preference customer is going to be withdrawn from them for project purposes so that we can operate the pumps. So, they're going to lose energy to market and pay for the facility that causes them to lose energy. And so, C-V-P power now is just getting marginally valuable. This might be the first year where you can buy power on the spot market cheaper than you can pay for C-V-P preference power.

Storey: And, why is power output declining?

Glaser: Well, for a lot of reasons. One . . .

Storey: The project demands?

Glaser: Well yeah, there's the preference power part, which doesn't diminish generation, just the power that's available to the preference customer. But, there are locations where we no longer generate as much power as we used to and the Trinity would be a really good example. Historically, we diverted up to ninety percent of the flow in the Trinity River, which is a tributary to the Klamath, into the Sacramento River through the Trinity power facilities. Those were really efficient power facilities. We ran them through about five or six different generators as it went through Trinity Dam, Lewiston Dam, through the conduit, Carr, down to Whiskeytown, over to Keswick.⁵¹ Every time it went through one of those facilities it went through another generator, generated a lot of energy. (Storey: Uhm-hmm.) In 2000, with the signing of the Record of Decision for the Trinity River Restoration Program, there is now a new model put in place for diversion and we must leave forty-three percent of the water in the Trinity River, on average. So, that was a huge block of not only water that was used to meet cold water needs on the Sacramento River for fish, but also that we ran through all our generators, and that just lost power.

Storey: Did you mean on the Klamath River?

Glaser: From the Trinity to the Sacramento.

⁵¹ The Trinity River Division in northern California consists of Trinity Dam and Trinity Lake, Trinity Powerplant, Lewiston Dam and Lake, Lewiston Powerplant, Clear Creek Tunnel, Judge Francis Carr Powerhouse, Whiskeytown Dam and Lake, Spring Creek Tunnel and Powerplant, Spring Creek Debris Dam and Reservoir, and related pumping and distribution facilities. The Trinity River flows 110 miles westerly where it joins the Klamath River at a point approximately 41 river miles from the Pacific Ocean. Plans to divert Trinity River water to the Sacramento River Basin formed part of the California State Water Plan. For more information, see Eric A. Stene, "Trinity Division: Central Valley Project," Denver: Bureau of Reclamation, 1996, www.usbr.gov/history/proj.hist.html.

Storey: The forty-five, forty-three percent?

Glaser: For the Trinity River. We have to leave . . .

Storey: Its left in the Trinity?

Glaser: That's right.

Storey: Oh, okay. But, so that isn't improving the cold water in the Sacramento River?

Glaser: Its diminishing the qualities of the cold water. See, because when we (Storey: Oh, okay.) brought that water over from the Trinity, that was very cold water, and one of the most difficult problems we have out there is to have sufficient cold water in our system to meet all the needs for returning anadromous fish.

Storey: Uhm-hmm. Because they're very sensitive to that stuff?

Glaser: Yeah. They have very, steelhead and salmon have very specific temperature requirements for both the maturing of their eggs, the survival of the juveniles, and for the in-migrating adults and out-migrating juveniles. (Storey: Uhm-hmm.) So, we have to keep certain water temperature targets all the way through the river systems, and we get that cold water out of our reservoirs. That's why we put the Shasta [Dam] Temperature Control Device on, so we could pick certain water temperatures out of the lake (Storey: Right.) so that we could satisfy our temperature requirements. Well, we brought a lot of cold water in from the Trinity, historically. So, not only did it generate a lot of electricity, it provided a lot of cold water that we needed, and there was water available, then, in the Delta to pump south to our water users. (Storey: Uhm-hmm.) And so, when that was left in the Trinity River, diminished power, diminished water supply, and diminished cold water. Now, the up side is, they recovered the river that two tribal communities are dependent on for their treaty rights to harvest salmon. Because, when we went to ten percent flow in the Trinity River it had an incredibly adverse affect on the salmon populations in the Trinity, which the Hoopa Valley tribe and the Yurock tribe have a right to harvest under their treaty. So, its not simple. (Storey: Yeah.) And, whenever you solve one problem you just move the problem somewhere else. Because, what's happened is we've become so dependant on every drop of water that when we lose a drop of water then we short somebody somewhere.

Storey: And what kind of a water year are we having this year?

CVP Water Allocations

Glaser: This is a tough water year [2009]. Today we're going to announce our first update to our initial allocation. Our initial allocation this year, we have a number of classes of water. So, our senior water right holders, the people that had water rights before we built our projects, they get the most water out of the project, and those are the Sac River water users and the exchange contractors, and their allocation was seventy-five percent. Under C-V-P-I-A the refuges get the same allocation as the prior water right holders, so the refuges received a seventy-five percent allocation. The water service contractors for municipal and industrial

water supplies, they received a fifty-percent allocation. So, we have communities that are solely dependent on C-V-P water for municipal and industrial water and they get fifty percent of their contract amount this year. And, then we have the water service contractors for agriculture, both north and south of the Delta. The most well-known ones would be Westlands south of the Delta, Tehama Colusa Canal Authority north of the Delta, they got a zero allocation, so they will get no C-V-P water. That was based on the February 1 state forecast. Based on the March 1 forecast, we will put out an update today, and as soon as I'm done here we'll start making our rollout of the announcement, and we had a really good February, about 150 percent of average precip in February, and the first week of March was pretty good. We got nearly all of the average of March in the first week. But even with those incredible storms, for that short period of time, for that three or four weeks, we will still have a seventy-five percent allocation to the prior water rights holders, seventy-five percent allocation to the refuge. We will have a fifty-percent allocation to M&I [municipal & industrial] water service. We will have a zero allocation to south of Delta ag, water service ag. We will have five percent north of the Delta to water service agriculture. Now, the Friant Unit, the initial allocation for Friant was twenty-five percent for Class I contractors, zero for Class II. This allocation will have sixty-five percent for Class I contractors, zero for Class II. So, even with all that rain, it just came up marginally.

Storey: You mentioned exchange contracts. Could you talk about what those are?

Exchange Contracts

Glaser: Yeah. Before we built the Friant Unit, which is Millerton Dam, its Friant Dam and Millerton Reservoir, down by Fresno, (Storey: Uhm-hmm.) on the San Joaquin River, there were farmers on the San Joaquin River and they farmed with senior water rights that they had granted to them by the state of California. Well, we wanted to use their water supply for our project, and so we entered into a contract with them whereby they gave up their senior water rights to the project and in exchange we're giving them Central Valley Project water that we deliver through the pumps from northern California. So, that's why they're called the exchange contractors. They exchange their senior water rights for very lucrative rights that replicated their senior water right that are now delivered through the Central Valley Project. (Storey: Uhm-hmm.) And so, they're called the exchange contractors. We have a similar situation north of the Delta, Glenn-Colusa Irrigation District would be the most well known. Those were senior water right holders. They had pre-1914 water rights. And, we wanted to build Shasta [Dam] and we wanted to build the C-V-P, and we wanted their water rights so that we could put that into storage and use that as part of the project supply. So, in exchange for them giving up their water rights they have very lucrative rights to C-V-P water. (Storey: Uhm-hmm.) That's why they get so much, seventy-five percent where the water service contractors get zero.

Storey: But, I think I read a story the other day about these exchange contractors south of the river that their contract said they could call their original water rights if they weren't delivered?

Glaser: That's correct.

Storey: Is that causing us problems?

Glaser: That's correct, in the initial allocation, based on the February 1 forecast. So, specifically here's what their entitlement is. If we're not able to provide them Central Valley Project water through out pump in the Delta Mendota Canal then we're obligated to provide them water from the Friant Unit, out of Millerton Lake. (Storey: Uhm-hmm.) And so, in our initial allocation we actually had to hold back Friant water in case we weren't able to deliver water through the pumps for the exchange contractors. That's why Friant Division Class I contractors only received twenty-five percent in February on the February allocation, but now are going to get sixty-five percent on the March allocation. That's because with all this rain we're pretty assured now that we're going to be able to deliver the exchange contractors through the pump and that freed up the Friant water.

Storey: Good. Its interesting the twists and turns this takes? (Laugh)

Glaser: It's, yeah, its, there's nothing logical about it. Its all based on rights under western water law, and some what appear to be very illogical things occur. That is, the water rights holders, the Sac River folks and the exchange contractors, when the unimpeded inflow into Shasta reaches, this year, 3.3 million acre feet, when we're pretty sure we're going to have 3.3 million acre feet in this water year, free flowing into Shasta Reservoir, then we need to provide the exchange contractors and the Sac River water users a hundred percent of their water supply, and then under C-V-P-I-A we'll have to provide the refuges a hundred percent of their water supply. (Storey: Uhm-hmm.) And this, based on the March 1 forecast, we were within twenty or thirty thousand acre feet of meeting that trigger. And so, its assured that we will provide them a hundred percent water this year. And so, all the new water is going to the senior water right holders. And even though its raining a lot, M&I will still get fifty percent under their water service contract, and Westlands will still get zero under their water service contract. (Storey: Yeah.) And so people are going, "How does that make any sense? Why wouldn't you give that to the cities, because obviously people need it more than rice, or almonds, or something else? Why do you do that?" And we do that because they're entitled to that as a matter of law. And, unfortunately, we don't get to decide which is the highest public value. That's not a value that we as operators of the project could do. Now, the Congress could do that, when they pass C-V-P-I-A. They said, "You're going to give a hundred percent to the refuges if you give a hundred percent to them." They can do that. I couldn't make that judgment, but now I carry that provision out. Even though, somebody will ask me, "Okay. Let me understand this. You're going to provide a hundred percent water supply to the refuges just to run out there in those wet areas, but you're only going to give fifty percent to that city?" And, my answer is, "Yes. Under the law that's what I'm going to do." (Storey: Right.) And the public has a hard time understanding that, Brit.

Storey: Yeah. And, I have a little bit of trouble with it too, for this reason, and I'm very curious about this. Congress passes a law, C-V-P-I-A, affecting the way water is allocated, yet our initial Reclamation law says we will operate under state law. How does this mesh? Can you explain that to me, by chance?

Reconciling Congressional Authority with State Water Law

Glaser: The water supply that the Congress reallocated through C-V-P-I-A as a project purpose was project water. And so, all they were saying is, "This water that the project's entitled to use

under state law, we're going to say now the refuges are equally important as this other obligation," and it's a federal project and that's a determination they can make.

Storey: Sure. Okay.

Glaser: And they did the same thing in Section (b)(2) of C-V-P-I-A when they said, "Oh, and by the way, in critical dry years you're going to set aside 600,000 acre feet of water that now goes to agriculture and M&I for fish and wildlife purposes. And, in normal years you're going to set aside 800,000 acre feet of water." And, we took that to the State Board, said, "Under federal law we're making these applications to the project for project-use water," and now those are embodied in our permit from the state.

Storey: Oh, okay. So we have a, well probably a series of water rights for the Central Valley Project?

Glaser: Well, they're permits. They're permits in California.

Storey: Permits? And . . .

Glaser: And, they're conditioned.

Storey: And, but they, (Glaser: Well we, we go to the . . .) they are federal permits?

Glaser: We go to the, (Storey: Okay.) we go to the California Water Resources Control Board and we make a request to them. We make a request to them if we want to change a point of diversion. Or, we make a request to them if we want to change a project use of water, because they have to assess that our change doesn't adversely affect anyone else's rights, (Storey: Uhm-hmm.) or our obligations under our permit. Because, under our permit we have to meet all kinds of water quality targets all through the river systems and in the Delta, and they will have to assess that the change that we're making does not adversely affect anybody else. And if it does not, then they will certify the change if it's consistent with their priorities for the use of state water. (Storey: Uhm-hmm.) And, it's a very public, difficult, protracted process. (Storey: Uhm-hmm.) So, we can't just decide we're going to do something different. The Congress can direct us and then we have to formulate the affects of that. We have to evaluate the affects on endangered species. We have to go through the National Environmental Policy Act on publicly developing this decision, NEPA process, so we'd have to produce an E-I-S [Environmental Impact Statement], (Storey: Uhm-hmm.) and look at alternatives, and then we'd have to go to the board with our permit change request. We make temporary requests to the board on permit changes and we make permanent requests to the board on our permit requirements. This February the Department of Water Resources and the Bureau of Reclamation, myself, and Lester Snow, signed a petition to the board to relax our outflow standards. We have a certain flow that we have to release to the Bay to keep the barrier of salt at a certain location. Remember this outflow issue, that you have to have so much river flow out to offset the tides that's trying to push the salt water in?

Storey: You have to give a counter pressure?

Glaser: Yeah. And so, there is a point where the fresh and salt water come together and they form a water quality of 2,000 parts per billion salt. Its called X-2 and we have to maintain that at a certain point in the Delta. So, we have to release enough water and we have to take into consideration tidal actions and the wind, because the wind can affect where X-2 is. And so, (Storey: Uhm-hmm.) we didn't want to release as much water as we had to to maintain X-2, and all the biologists and other parties determined that it wouldn't hurt to let X-2 come further into the Delta. And so, we petitioned the board for a temporary relief from X-2, and then they have to consider that. They have a hearing. We asked for emergency consideration, but because the governor hadn't announced a drought emergency yet, they had a hard time dealing with that. So, they held a hearing. It started to rain before we could get to through the hearing. We got increased flows in the river and the issue went away, and then they denied our petition. (Storey: Uh huh.) And they said, "You knew about this longer. Quit coming in so late." And so, there is this dynamic between the Water Resources Control Board, the Department of Water Resources, who operates the state project, Bureau of Reclamation, who operates the federal project, and then all of the interests. And so, every decision has scores of people that participate in the dialog that gets to the decision. Its very difficult, very dynamic. Very interesting, by the way.

Storey: Well, speaking of water permits, one of the things that's happened recently is that our permit for Auburn [Dam] was (Glaser: Yeah.) rescinded, repealed, whatever it is? (Glaser: Uhm-hmm.) Could you talk (Glaser: Was not . . .) a little about that?

State Refused to Renew Water Permit for Auburn Dam

Glaser: Was not renewed. Yeah, when you apply for a permit you would do that ahead of making a decision to invest, because you aren't going to invest until you have a permit in hand. So, when we were going to build Auburn⁵² we provided, we applied for a water right permit to store water on the American River, and it was conditioned. And, of course, we wanted to maintain that permit because it had a pretty good date. It seems we applied for that back in the '70s. So, you have this date that you want to preserve. And, as the decisions on Auburn strung out they would have status hearings where you would have to come in and reapply and you would have to convince the board that there was still sufficient opportunity for this to be built that they would preserve your permit, which preserves your priority date. And so, each time it would come up we would go argue before the board and the board would grant an extension, would renew our permit. And so, we had a status hearing this last year, this last summer, and we went in and argued for the retention of our water right permit and for its renewal, and after taking testimony and the staff consideration by the board, the board denied that petition, that request. And, we could have appealed that but we didn't think that we'd be successful on appeal. And, of course the board said, "Look, if you ever get Auburn moving just come back in and reapply, but we're not going to lock up this block of water." So, we lose our priority date, and politically that was, there was attention to that. There were the people who wanted to deny it, of course, the request for extension, and then the local people

⁵² Conceived as multipurpose project, Auburn Dam was to be the primary feature of the Auburn-Folsom South Unit, American River Division of the Central Valley Project. Congress authorized the project in 1965, and in 1976 was marked for elimination in Carter's "hit list." For more information, see Jedidiah S. Rogers, "Auburn Dam: Auburn Folsom Unit, American River Division, Central Valley Project," Denver: Bureau of Reclamation, 2013, www.usbr.gov/history/projhist.html.

who are the Auburn project sponsors and who are represented by Congressman [John] Doolittle. They very much wanted the permit to be renewed. They were very disappointed in Reclamation for not being able to convince the board otherwise. And, it was just a little bit of noise for a while and then the issue has pretty much gone away as an issue.

Storey: Not likely that the dam's going to be built, you think?

Glaser: Well, you know, its kind of funny, not speaking as a Reclamation person but just as somebody who's watched Auburn over a long period of time and now has got some responsibility for managing the American River, storage upstream of Folsom [Dam] would be very, very valuable, both for water supply, but even more than that for cold water pool for maintaining water quality standards in the American River below Folsom. (Storey: Uhm-hmm.) Because right now, Folsom's a very small reservoir, just a million acre feet, and it's a very shallow reservoir. Its kind of flat. That's why its so dramatic when you drop down. You get miles of, you don't get this nice, neat little bathtub ring around it. You get miles of exposed beach when you drop down, because it's a very flat reservoir.

Storey: And the old town shows up?

Glaser: Yeah. And, but because its flat and not very deep, you don't have a very large cold water pool. Ambient air temperature affects water temperature quite a lot in Folsom. And so we don't have a very good cold water pool in Folsom, and then there's not very much cold water stored above Folsom that's available to manage to meet water quality standards. And, this last year I can remember in the first of November we had to meet fifty-eight degrees at Nimbus, which is a regulating facility downstream from Folsom, and its where the fish hatchery is. We had to maintain fifty-eight degrees for spawners and we were literally wringing the last thousands of acre feet of cold water out of Folsom, out of our low-level outlet works in the dam. We found where the cold water was, found a place we could get it out of there, and if you went out there that day you would have seen water just sort of trickling down the face of the dam. You're going, "What in the world is that about?" Well, we were taking out those last few acre feet of cold water to hit fifty-eight degrees. That's going to become more problematic for us. (Storey: Uhm-hmm.) And so, cold water in the American River is going to be a huge issue in the future. It's a difficulty for us under our biological opinion with National Marine Fisheries Service right now for steelhead and salmon, and its going to become more difficult. The American, there's a coalition on the American River that's trying to get a lower American River flow standard in place. We have a temporary standard we're doing voluntarily, but they want an enforceable flow standard in the river and it will have water temperature targets, and without more storage we won't be able to commit to those water temperature targets without being able to violate them. (Storey: Uhm-hmm.) Because, in years like last year, and maybe this year, there's just not enough cold water. And so, that's where Auburn would be really valuable. But, that gets lost in the debate over Auburn, you know, it's a dam (Storey: Yeah.) and its Auburn. (Storey: Yeah.) Its symbolic.

Storey: On a fault.

Glaser: Its symbolic.

Storey: Yeah. Very symbolic. Let's see . . .

END OF SIDE 1, TAPE 2. MARCH 20, 2009.

BEGINNING OF SIDE 2, TAPE 2. MARCH 20, 2009.

Storey: The names of a couple of your nonprofit groups that you worked for.

Glaser: Oh. I worked for the National Fish & Wildlife Foundation. That was my first nonprofit. (Storey: Right.) My second one was Douglas Land Conservancy, in Douglas and Elbert counties here in Colorado. And, the third one was the Colorado Foundation for Water Education.

Storey: Right. Okay. It was the middle one that you hadn't (Glaser: Uhm-hmm.) mentioned before. When you say a fifty—oh, we don't provide water to Los Angeles (Glaser: That's correct. We do not.) from the Central Valley Project?

Glaser: We do not.

Storey: That's the State Water Project?

Glaser: That's correct.

Storey: How is the State Water Project faring in all of this?

Glaser: Well, the state . . .

Storey: And, is it affecting us?

Managing CVP in Relationship to the State Water Project

Glaser: Yeah. The State Water Project is just a thumbnail. The Central Valley Project is generally viewed as having more storage and less pumping capacity in the Delta. And, we provide about seventy-five percent of our water for agriculture and twenty-five percent for municipal and industrial purposes. (Storey: Uhm-hmm.) The State Water Project would be viewed as pumping and conveyance long, rich, and they have very little storage. They can only store in Oroville [Dam]. That's their only storage facility that they have north of the Delta. (Storey: Yeah.) So, they're storage-short and conveyance-long, and they provide about seventy-five percent of their water to municipal and industrial contractors, and twenty-five percent to agriculture. So, they're sort of the reverse of us. We're storage-rich, conveyance-short, seventy-five ag, twenty-five percent M&I. They're storage-short, conveyance-rich, seventy-five percent M&I, twenty-five percent ag. So, when they're shorted it has an incredible impact on cities. When we're shorted it has an incredible impact on agriculture.

Storey: And, I assume they're short this year?

Glaser: Yes. They, Oroville's [Dam] their only real storage facility. They, last year they drew Oroville down to the lowest level it has been since the initial fill, record-low carryover. And so, their

initial allocation this year for the State Water Project was fifteen percent. Now keep in mind, seventy-five percent of their water goes to M&I. (Storey: Uhm-hmm.) They get a fifteen percent allocation. In February they were struggling with their—that was the fall allocation. They make their initial allocation in the fall of the year. In February, they were thinking of reducing it to ten percent. They were very close to making that decision, then it started to rain a little bit. Well, they didn't want to make that reduction, but if it didn't start raining they knew they were going to go maybe even to five percent. It started to rain. Based on the March 1 forecast, they raised it to twenty percent. But again, twenty percent of contract amount, seventy-five percent of theirs goes to M&I, including much of it to Silicon Valley and the Metropolitan water service area for Southern California.

Storey: Its going to be tough on landscaping?

Glaser: Well, they're going to require mandatory rationing by all customers in the State Water Project system. (Storey: Uhm-hmm.) It's unprecedented.

Storey: Yeah. M-W-D [Metropolitan Water District] has already started (Glaser: Yeah.) demanding that of its contractors (Glaser: Yeah.) too.

Glaser: They did it voluntarily last year. They got, I think, like an eight percent reduction through voluntary conservation. They're going to have mandatory conservation this year. Their board did not want to do that. It was very difficult. (Storey: Yeah.) So, and yeah, does it affect the federal project? They're interesting. This is an odd relationship between Department of Water Resources and the Bureau of Reclamation. We're both fiercely independent of each other, yet we have, as a matter of law, what's called the Coordinated Operating Agreement,⁵³ because they're storage-short and conveyance-long and we're storage-long and conveyance-short. It was believed in the '80s, you know, if we just coordinated our pumping and had the authority to move our project through their pumps and conveyance when they had capacity that we could get more water south of the Delta and there would be efficiencies. So, we have a Coordinate Operating Agreement and we actually have a Joint Operating Center.

Now, a Joint Operating Center you would think that somebody would operate the state and federal projects. That's not what it means. They have their Operating Center. We have our Operating Center. They just happen to be side by side in the same building. And so, we have this ongoing dialog on how we operate our projects and we coordinate. You remember I said earlier about today we've sort of balanced out our pumping, but last week we may have been pumping 4,800 cubic feet per second and then twenty-two, and this week we may pump the same gross volume but maybe they're pumping thirty-eight and we're pumping thirty-three. And so, we balance out our pumping loads based on demand, water available out of storage, our entitlement to pump, space in San Luis, all these different factors go into who's pumping which days. (Storey: Uhm-hmm.) And so, the fact that we can move our water

⁵³ Signed in 1986 the Coordinated Operating "Agreement between the U.S. Government and the State of California. Determined the respective water supplies of the CVP and the SWP while allowing for a negotiated sharing of Sacramento-San Joaquin Delta excess outflows and the satisfaction of in-basin obligations between the two projects." For more information, see United States Department of the Interior, Bureau of Reclamation, Mid-Pacific Region, "Long-Term Central Valley Operations Criteria and Plan, CVP-OCAP," Sacramento, California: June 20, 2004, www.usbr.gov/mp/cvo, (Accessed June 2014).

through their facilities really helps us sometime, because later this summer Oroville had its lowest carryover ever. So, this summer, when we're releasing water out of Shasta or Folsom for water quality permit requirements, we'll be able to pick that water up in the Delta and move it through the state pumps even though we're pumping the federal pump at full capacity, and we'll be able to move our water down the San Luis through their facility. That's what the Coordinated Operating Agreement does for us.

Storey: And I assume there's some way we pay the electricity (Glaser: Yeah. We pay a . . .) and that kind of stuff? (Laugh)

Glaser: We pay a wheeling charge. We pay a wheeling charge. (Storey: Yeah.) But, it's a cheap investment for the value of the water, if we can use their facility, and it's actually a good thing. There's efforts from time to time to actually consolidate the projects. (Storey: Uhm-hmm.) I might have talked about it the last time we visited about my time that I was the lead negotiator in 1991, for a year we negotiated with California to transfer the C-V-P to the state. And, so for a year I was the lead negotiator on the federal team for transferring the Central Valley Project.

Storey: And why did that fall through?

Problems with Merging CVP with SWP

Glaser: Well, it was in a time it may be a bad idea. It's one of those that theoretically sounds good, because you've got these two projects that work side by side (Storey: Uhm-hmm.) under different jurisdictions with different rules.

Storey: And operating under a Coordinated Operating Agreement? (Laugh)

Glaser: And under a Coordinated Operating Agreement, and why wouldn't you, you know, where's the federal interest in operating that project? Why wouldn't you just turn it over to the state? The project's fully within the state. You know, there's a lot of logic for it, but practically and politically it's incredibly difficult. Will it ever happen? Not in the future, that I can see. (Storey: Uhm-hmm.) But, I think we will become more and more coordinated in our operations. We'll see more of that. I think we'll just be, that'll be demanded of us. (Storey: Uhm-hmm.) It's an interesting thing. The Central Valley Project was built first and then the State Project was built on top of it, and so we have better water rights than they have. And so they, when they, when new storage was built south of the Delta part of the problem was you had to pump water when there was demand, because the only storage south of the Delta was San Luis Reservoir and it's not very big, just a couple million acre feet, and so there was no place to put the water when you pumped, unless it was going to some customer for use. Well, Met [Metropolitan Water District] built their big reservoir they put online in 2000 and Kern County built a big water bank where they store water in the ground. And so, the state started pumping a lot of winter water, around 2000, (Storey: Uhm-hmm.) maybe as much as a half a million acre feet to 800,000 acre feet more than they historically pumped. And, in our assessment under the biological opinion, the Fish and Wildlife Service, and my biologists agreed that those pumping effects from that increase had an adverse effect on delta smelt. And so, when the judge weighed the decision, and his interim orders, and in the new biological

opinion they had to cut back their winter pumping. And so, now you have Met with all this investment down there, and Kern County with all this investment and there's not the water to fill it, because that was that winter water the state was pumping. (Storey: Uhm-hmm.) It's a huge political issue right now. Part of the reason that, over the biological opinion we were sued by the state water contractors, Kern County, and Westlands, I believe, just recently filed suit against our new biological opinion we signed in December of last year. So, even amongst our friends we have our days. (Laugh)

Storey: Well, I know that you have other things you have to do (Glaser: Well, we probably have . . .) pretty quickly here.

Glaser: We probably have five or ten minutes if you want to do that, then I just need to grab a phone and get online. Or, if this is a good break point we'll just pick it up some other time.

Storey: Well, why don't we pick up another time?

Glaser: We covered a lot of things today.

Storey: Yeah.

Interesting Work in the Region

Glaser: Its very, its—I'll tell you, I've worked a lot of places in Reclamation. You know, I spent a lot of time in Billings. Sat at the same office and worked in the Upper Missouri Region, the Missouri Basin Region, and the Great Plains Region, because I was there when we went from seven regions, to six when we consolidated Upper and Lower Missouri, to five when we did away with Southwest (Storey: Yeah.) and we became the Great Plains. And so, I did a lot of work in the plains states, and then I went to Washington, of course, and ran the Washington Office, came to Denver here as a deputy commissioner, ultimately. And so, I've seen Reclamation in a lot of different capacities. Nothing near as interesting or as difficult as what we do in California. Just, its beyond description, the complexity and the uncertainty of where the project's going. (Storey: Uhm-hmm.)

To give you an example, when I talked to Truckee Carson Irrigation District on the Newlands Project in Nevada and they're telling me just how dreadful a water year they're going to have this year because we had that canal failure and we have not made a permanent repair on it, this is the Fernley reach of the Truckee Canal. And so right now we're under a temporary restraining order from the court that we can only run 350 cubic feet per second through that canal, which is designed to 1,100 and typically conveys up to 900. And so, that's an impact on the project, and this year they're going to be, they're going to have an incredibly dry year because of it. They're going to get an eighty-five percent water supply, and for them that's almost an unmanageable dry year raising alfalfa. (Storey: Yeah.) So, they lose a cutting in part of their service area. And, at the same time I have to talk to Westlands about a zero allocation to people that raise pistachios, and almonds, and they're going to be losing permanent crops, and we're talking about a billion dollars of economy. Its estimated that if our allocation this year holds it'll cost 60,000 jobs in the valley, 60,000 jobs. There are communities in the Central Valley that have populations of 50,000 people with thirty-five

percent unemployment, or forty percent unemployment, (Storey: Uhm-hmm.) and middle class people in food lines. And so, when some projects talk about the difficulty that they face, the Klamath would be another one, if they don't get a hundred percent water supply they're just devastated, and we're talking about two hundred jobs. And, I don't mean to diminish that in a small community. That's not my point. But, when you get into the Central Valley I don't know how it gets lost, but we're talking about 60,000 jobs. (Storey: Yeah.) Direct loss. And, if this was another industry—and this is interesting for us Brit. Its worth reflecting on. And, if you can figure out the right questions its worth asking, just from a historical perspective. Because, I think it's a profound problem. It's a social bias that I don't understand, a public bias I don't understand. But, if this was the auto industry and we were talking about 60,000 jobs and forty percent unemployment it would be in every paper in the world and we'd be falling over ourselves to figure out how to address that. So, what is it? (Storey: Uhm-hmm.) And, they make cars, or they finance home loans. So, what is it that has created such an institutional bias in us as a people that the people that are raising food can lose 60,000 jobs, and at forty percent unemployment, and it doesn't make any paper outside the local paper? It doesn't even make the regional or state papers. I don't know what to make of that, but its profoundly troubling to me.

Storey: And its going to mean food prices are going up?

Glaser: Ninety percent of all the almonds in the world are raised in this environment.

Storey: Marzipan is going to get awfully expensive. Yeah, I saw that they actually import to the German marzipan makers.

Glaser: Oh yeah. The short-grain rice that's grown north of the Delta, short-grain rice north of the Delta is exported to Japan and Middle Europe. They provide almost all the short-grain rice to Middle Europe, and a good part of the short-grain rice for Japan. (Storey: Uhm-hmm.) That's the sticky rice, as opposed to . . .

Storey: That stuff you make sushi out of?

Glaser: And that you put in your bowls to serve with any oriental meal.

Storey: Uhm-hmm. I don't know.

Glaser: It's a profound issue to me. I, you know, I'm sort of a student. I read a lot about social issues, of all sorts. I just finished the autobiography of Martin Luther King, the most profound book I've read in a long time. So, I like reading about cultural issues, social issues, and this one just troubles me, you know. I've read every book that they've written on water and I can read all the biases in the book, but when it gets to the human dimension, I don't know why it doesn't, it doesn't have any impact, and particularly as it relates to irrigated agriculture. (Storey: Yeah.) Because if this was in the Midwest, we'd have an amendment to the Farm Bill already. They'd be pumping money into there. I don't know what it is.

Storey: Well, does it have to do with your congressman there?

Glaser: No. No, I think it has to do with something more, more global than that. I don't know. (Storey: Uhm-hmm.) Its an interesting thing. It troubles me greatly.

Storey: Yeah. Its going to be a vast economic impact, just like the auto industry, and A-I-G [American International Group]. And . . .

Glaser: But, you've read about those in the *Rocky Mountain News* before they shut it down, and the *Denver Post*, but you won't see anything about 60,000 jobs in the Central Valley.

Storey: Hmm-uhm.

Glaser: You won't see food lines . . .

Storey: Not unless you're leading, reading the news clips that come around.

Glaser: And, you won't see those outside of Fresno or Madera, or, you won't even read them in the *Chronicle*, (Storey: Yeah.) the *San Francisco Chronicle*, or the *Sacramento Bee*. Its really an interesting issue.

TCID Federal Case

Storey: Let me ask one more quick question, now that I'm thinking about it. T-C-I-D [Truckee Carson Irrigation District] and this legal action, has Reclamation been involved in that in any way?

Glaser: The answer to that is mostly no. This is a felony indictment by a federal grand jury, (Storey: Uhm-hmm.) so these are felony charges. And, that is an issue that is, that will play out totally independent of the Bureau of Reclamation. We must be able, as a government, to separate our functionality, and even a different part of [U.S. Department of] Justice will prosecute that case separate from the Justice attorneys who defend me when we're sued. Just a different arm of Justice. So, it's a totally separate legal process. (Storey: Uh huh.) And, in theory, I must, as an administrator, separate my responsibilities of an administrator from that other activity. Now, the reason I said, "mostly," is because the foundation for the allegation, because this is clearly an allegation—its an indictment by a grand jury. Its not, there has been no trial. Its been stayed a year—but, the foundation for the allegation was that Truckee Carson Irrigation District [TCID] falsified their reporting to the Bureau of Reclamation regarding their conservation accomplishments on the project that gives them access to federal water for use. "They knowingly and willfully falsified," that's the allegation, they knowing and willfully falsely reported for the purpose of misappropriating federal resources. So, that's a conspiracy charge. And so, we will be asked to testify at some point. But in the meantime, we need to continue to manage our project, (Storey: Uhm-hmm.) because they've been indicted as an organization, yet we have a contract with them to manage our asset. And so, we will do everything we can to keep those processes separate. But T-C-I-D, they're human and they must feel every action taken that is adversarial they must feel like this is all piling up on them. (Storey: Yeah.) So, from their perspective I think they would, the answer would be, "No, you know, these are inexplicably tied." From our perspective, my obligation is to keep them absolutely separate. (Storey: Uhm-hmm.) So.

Storey: But, Reclamation didn't identify this or . . .

Glaser: A whistle-blower. It actually is a whistle-blower from within the district, I understand.

Storey: Oh. Okay. It wasn't something that we saw then?

Glaser: No. If you read the clips, it, T-C-I-D will claim its part of a labor dispute and some of their ditch riders blew the whistle and falsely . . .

Storey: All of whom got fired, I noticed?

Glaser: Yeah. They--RIFed. [Reduction in Force]. They RIFed fifteen employees, I think.

Storey: Because of budget shortfalls? Well, let me ask you if the information on these tapes and the resulting transcripts can be made available to researchers within and outside Reclamation?

Glaser: Oh, gees. I don't say anything here that I wouldn't say in any forum, asked the same question. So, yeah surely if there's any value to what I might think, yeah. I see no problem with sharing them.

Storey: Great. Thank you.

END OF SIDE 2, TAPE 2. MARCH 20, 2009.

BEGINNING OF SIDE 1, TAPE 1. SEPTEMBER 3, 2010.

Storey: This is Brit Allan Storey, senior historian of the Bureau of Reclamation, interviewing Donald R. "Don" Glaser, regional director of the Mid-Pacific Region of the Bureau of Reclamation on September 3, 2010, at about 8:00 in the morning in Building 67 on the Denver Federal Center. This is tape 1.

Well, you know with the water years the way they've been for the last few years, I'm wondering how we're doing in the Central Valley and up at Klamath.

Klamath and Central Valley Projects Water Issues

Glaser: Yeah, last year was a really hard water year for us in the Central Valley. This year was really hard water year for us in the Klamath. Its really funny the kind of weather we're getting. The weather's really unusual. (Storey: Um-hmm.) Unprecedented. Its really hard for us to model our water years because the weather patterns just don't match the historic weather patterns. I don't know if that's something to do with climate change or if that's just something to do with climate variability, but its made it hard. Last year we had a 10 percent allocation to agricultural water service contractors and 50 percent of their lands are in permanent crops, and so it was very, very *stressful* year for the water users, and we sort of had to go to extraordinary ends to help them cover their water needs just to keep their permanent crops alive. (Storey: Um-hmm.) This year in February in the Central Valley we started out with an allocation, north end, south of the Delta, for agricultural water service of zero. So in February they were thinking they had no water supply. Fifty percent of their land, again, is in

permanent crops, and they probably have [\$]20,000 an acre invested and so it was pretty stressful. Stressful for the water users, and some of that just spills over on us because we feel really accountable for providing water under the contracts. And then started to rain in March and April and May, and it never really rains much in April and May. And even into June, and this year's water year went up to, finally, to 45 percent. But the problem is by then its really hard for the water users to *make use* of that water because they have to make their planning decisions in January and February. So, now they have a lot of carryover water and they're worried that we're going to spill their water. So it just goes on and on.

Klamath this year, it was just a very dry year in Klamath, and we had to take extraordinary measures to get up to 40 percent allocation. And some of the fisheries interests, particularly the Hoopa Valley Tribe is not very happy with us that we made that water available to agriculture. They think its going to come at the expense of fish. So . . .

Storey: This is on Klamath.

Glaser: Actually the lower Klamath [River] which is the Trinity River where the Hoopa Valley Tribe reservation is. Their reservation lands. They are on the Trinity River, but the Trinity River comes into the Klamath so they have the lower river they share fish migration. So they're worried about water conditions in the lower Klamath. That's were they had the big fish die off, I think it was probably in 2002. And they're afraid that we could have that same condition this year. So they get a little upset with us when we make water available for agriculture when they think it should be made available for fish and to protect what they see as a tribal trust resource. So it's a really complicated time right now. (Storey: Yeah.) And we have one interest playing off against another. (Storey: Um-hmm.)

River Restoration Programs

One of the really unusual things that we have right now is that we have these river restoration programs, and we started out with the Trinity River Restoration Program, and that really started with a decision clear back in the 1980s when Cecil Andrus was secretary, but really got its focus in the early '90s with the Central Project Improvement Act that had section B-23 that covered the Trinity River Restoration Program and directed us to recover the Trinity River and the fish runs that use the Trinity River.⁵⁴ And, as a matter of background, in the '50s we developed the Trinity Division of the Central Valley Project, and its really a transbasin diversion. We dammed up the Trinity River and then put a tunnel through the mountain and we bring that water over to the Sacramento [River]. So water that used to be tributary to the Klamath that outfalls to the ocean now goes over to the Sacramento River up by Redding. And for a period time we took the largest part of the water out of the Trinity River. I've read reports that said we took as much as 90 percent of the flow. Which changed the whole river. The river narrows and it down-cuts, and you don't have high flows that maintain the flood plain, and things encroach on the river—bridges and houses. So in the '90s we were told to go back and establish a flow for the Trinity that would maintain its natural systems and produce pre-project fish populations. And we did an E-I-R

⁵⁴Trinity River Restoration Program "is designed to restore the Trinity River and its populations of salmon, steelhead and other fish and wildlife; see Bureau of Reclamation, Mid-Pacific Region," The Trinity River Restoration Program, July 2013, www.usbr.gov/mp/PA/do, (Accessed June 2014).

[Environmental Impact Report] /E-I-S like we usually do and signed a record of decision in 2000 that said we're going to leave a substantial amount of water *in* the Trinity River. That didn't go over well in the Central Valley where that water was now being put to beneficial use, and we've been struggling over that every since.

But it takes an incredible amount of time to deal with these river restoration programs because people get to where they like the river the way it is. And when you start to turn it back to a more natural river it creates all kinds of conflicts—land use conflicts, often, but even water use conflicts. And now we have the San Joaquin River Restoration Program that was a result of a lawsuit and a settlement. And the San Joaquin is even more difficult because the San Joaquin below Friant Dam, the Friant Unit of the Central Valley Project, was a dry river bed, thirty or forty miles of it, since the 1950s, or certainly since 1960, and so people began to use it as a dry river, and they farm right up to the edge of the channel. They actually have just created crossings over the old river channel. Put in a little eighteen inch culvert and fill in the channel, and they use the old channel for conveying water like it was a canal feature, and they pond water up in it and use it for water supply and now we're going to come along, and we're going to reestablish the natural river. And we're going to put substantially high flows down a river that's had *no* flows for half a century. And the people that live along the river, they aren't very happy. And we were just sued last week in claims court for a trespass and takings relative to the restoration program by the people who farm along the river that will be reestablished. A lot of people don't want to see salmon come up the river. They're afraid of having Endangered Species Act issues be applied to them. They haven't had a river, so they haven't had fish so they didn't have to worry about that. (Storey: Um-hmm.) And so there's just a lot of back pressure for us to *not* implement the restoration program. They're worried about seepage once you have a river that's running water year round. That it'll raise the water table and seep their lands, and they won't give us access to their lands because they don't want us to be able to gather the data that allows us to move forward with the project. So, it's hard for us to go in and monitor groundwater tables, and it's pretty interesting. It's not very traditional for what Reclamation *does* (Storey: Um-hmm.) as a matter of business not the Reclamation I started with, anyway, in 1975.

Storey: So if the river's been dry, where's the water coming from for the restoration.

"So the Stakes are Really High"

Glaser: Its coming from the water supply for the Friant Division of the Central Valley Project. And so, just like on the Trinity River, where the water that's going to go down to the Klamath and out to the ocean comes from the Central Valley Project waters by the recovered water for the restoration flows for the San Joaquin River will come from the Friant water contractors' water supply. But, of course, under the act, like most public laws, they try to minimize the effect on *any* party, so we have a—quite a few mandates to see if we can offset the impacts to Friant water users for making this water available. And that, in itself, is difficult because in trying to help Friant make up the water that they are otherwise entitled to, west side farmers, the San Luis Unit of the C-V-P, they think they're being adversely affected, and that water would have been available to them. So it just goes on and on. So you have one Central Valley Project unit that is struggling with the effects of changes on another part of the Central Valley Project unit, and they see that it adversely affects them. So even within the water user

community they're beginning to struggle over just the absence of water. If there's not water available to support agriculture, and this is the most agriculturally productive land, certainly in the United States, maybe in the world. And so a part of the economic engine for these small communities. So the stakes are really high, and so the tensions are really high. (Storey: Um-hmm.) And so now we have conflicts within our own contractors.

Actually you'll have contracts within the Friant Division itself between what are called Class One Contractors and Class Two Contractors. And one of them gets a more full and secure water supply. One of them gets a more supplemental water supply. And the Class Two Contractors truly believe that they're being—that the water made available to the restoration program, and other decisions by Friant, are unfairly and disproportionately affecting them. So you're getting conflicts even within the same divisions between water users. And so it makes just for a very difficult time. Yeah. Very difficult time for our water users. Very uncertain. We have a lot of water users that are actually going out of business. They can no longer cover the costs of operations with the uncertainty of water. (Storey: Um-hmm.) And, oddly, it spills over into other areas too.

Right in the middle of the San Luis Unit, actually right in the middle of the Westlands service area, and most folks have heard of Westlands, I think it's the biggest independent irrigation district in the United States, right in the middle of it is Lemoore Naval Air Station. And Lemoore Naval Air Station farms about 18,000 acres around their base to keep down birds and dust and to maintain a clear surveillance around their base. And they get their water for this agricultural land from Reclamation under a water service contract. So last year they got 10 percent. And they were pretty upset, and they expected Reclamation to just give them water because it was a national defense risk, and not understanding that we can't do that as a matter of law and contract. We just cannot give them water. And, but that's not what they understand. They only understand that it puts their pilots in harms way, and so even just a few weeks ago I was meeting with an admiral from the Navy on water supply for Lemoore Naval Air Station. It has its way to work out into all kinds of different areas of interest.

On the other side of the issue the salmon stock in most anadromous fish in the Central Valley are plummeting. And so you've had commercial and recreational fishing shut down, particularly as it relates to salmon harvest, and so you have that whole component of the economy that just immediately loses their livelihood, and so they're upset on the other side of the issue. And they don't really have much sympathy for the farmers who take water out of the Delta [the Sacramento River San Joaquin River Delta]. They just see that pumping the water as being what's caused the fish populations to decline so sharply. And it's probably one factor, but it's not the only factor, and it's really, because it's such a complex system, it's, really, hard to sort out really what the issues are we are dealing with. Because the Bay Delta is a tidal wetlands system and so it's really affected by tidal actions. And it's a very complicated system hydrologically and ecologically. And so right now our most focused effort is on

addressing Klamath issues through the Klamath Basin Restoration Agreement⁵⁵ and the hydropower agreement and trying to sort out really what's happening in the Bay-Delta so that we can support the state's stated objectives of having a sustainable Delta and a reliable water supply.

Delta-Bay Issues

They've actually passed legislation at the state level that says that is the state's priority to have a sustainable Delta and to protect what is the largest estuarial system on the West Coast. And to have a reliable water supply. There're all kinds of other issues that play in the Delta. The Delta has scores of hundreds of miles of levees, and these levees protect what used to be tidal marsh areas that were dried up and turned to agriculture, but over time this land has eroded and oxidized and now the land is maybe anywhere from ten to twenty feet below the elevation of the water in the Delta. And so these levee systems now become dikes because they have water on them constantly. They were never designed to hold water back as they're expected to do today, and you have these large holes in the Delta, now, and if you get a levee failure then the water rushes into that island, which is now a hole, and when that happens it draws sea water into the Delta because the water to fill the hole has to come from somewhere. So it comes from the Bay [located at the northeast corner of San Francisco Bay, the Delta waters connect to the San Pablo Bay through the Carquinez Straits] and the worry is now you'll have a catastrophic earthquake in the Delta and that sea water will race in from the bay and immediately cut off all water supply to Contra Costa County, to the State Water Project, and the Central Valley Project. And the State Water Project provides a water supply to twenty-plus million people. And you could have that water supply cut off with a minutes notice. It could be shut down for months or years. And so they're incredibly concerned, and, of course, the Delta is a seismic zone. And so they're afraid they'll get a large seismic action centered in the Delta. The levees that are not designed to withstand that, they're built on peat islands without foundations, they will catastrophically fail, the salt [water] will come in from the Bay, and you'll have to shut down all of the pumps that pump out of the Delta. And that's probably 25 million people get their water supply from there or so. *Lots of big stuff.*

⁵⁵ "KBRA is a settlement agreement among many diverse parties that creates a solid path forward on long-standing, stalemated resource disputes in the Klamath Basin. The KBRA takes a multi-dimensional approach that resolves complex problems by focusing on species recovery while recognizing the interdependence of environmental and economic problems in the Basin's rural communities.

"The goal of the KBRA is to foster environmental restoration of the Klamath Basin in a manner that supports and enhances the Basin's diverse rural economies including fishing, farming, and ranching.

"Major Outcomes of the KBRA:

- Removal of four hydro dams in the Klamath River;
- Increased water flows for fish, especially during dry years;
- Settlement of water-related litigation and increased water certainty for irrigators;
- Reintroduction of salmon to historic range in the Upper Basin;
- Large-scale habitat restoration in the Upper and Lower Basin;
- "Safe harbor" for participating farmers and ranchers;
- Renewable energy and affordable power options for the agricultural community;
- Economic revitalization programs for tribal communities;
- A coordination council managing the watershed as one."

See "Klamath Basin Restoration Agreement: Restoring a river and Revitalizing Communities," www.klamathrestoration.org/index.php/kbra-summary, (Accessed June 2014).

Storey: Lots of big problems.

Glaser: It really is.

Storey: Course it would restore the Delta in one sense.

Glaser: Well, you know, but it really doesn't, see, because the Delta never was that deep water habitat.

Storey: Oh, that it would be then?

Glaser: Now its going to be twenty feet deep, and its just going to be a deep water habitat.

Storey: Instead of a marsh.

Glaser: Yeah, instead of this saline marsh. Because what has happened is this peat that had deposited over tens of thousands of years, because it's a delta, that'd come down the different river systems with high water and it deposited in the Delta area. Well that's all gone now. Its all eroded or oxidized or compacted and so now you're just going to have a deep water habitat which isn't natural at all. None of the species at risk will benefit from having deep water in the Delta. (Storey: Um-hmm.) And so if you do not select which areas you restore, because not all islands have eroded the same way. Because not all of them were subjected to the same kind of farming activity. But they've been farming out there a hundred and fifty years. And the people in the Delta, they aren't real excited about having the Delta to return to a tidal estuary. Because they've had the levee system for over a hundred-plus years, and they've been farming these islands that period of time. And they're upset that they're having to *give up* their farming livelihood which they see just to protect Metropolitan Water District or Westlands or somebody else. And so now you have the Delta interests who are opposed to any of the activities now going on relative to the recovery of the Delta.

"Regional Politics are Incredibly Difficult"

So the politics is just incredibly difficult. And one of the things that's so different for me—I come from the high plains so I'm used to Montana, North Dakota, South Dakota, Wyoming where you have one representative elected at large in the state in the House. Well out here, I dunno, they have fifty-plus representatives elected in California so every small interest area has its own congressman. And so the members of Congress have a very narrow perspective on the interests of their constituency. And so it's a very divided delegation in the House of Representatives. I'm just not really used to that. Getting used to it. But it makes things very difficult because even member in the House in the same party fundamentally disagree on what the values and interests of the state are. (Storey: Um-hmm.) It just depends on what geographic area they represent because if you represent the Delta then you're not very interested in the tunnels that are being talked about or the Peripheral Canal or what's called the Isolated Facility now. You're not very interested in that because your folks will see that puts your interests at risk. They're not very interested in restoration of the Delta if it means retiring agricultural activities in their area. They're seeing themselves become a sacrifice zone to somebody else's problem.

And the same thing happens with the San Joaquin River Restoration Program. The farmers who *cut the deal* aren't the farmers who are getting the river. And so the Friant Unit who was involved in the settlement, they don't get the river. The exchange contractors get the river. And they didn't have anything to do with the settlement, but they get the river. And they think that that's creating adverse effects on them for an issue they had no interest in. And, of course, they had their own member of Congress who will articulate that argument. And so you'll have this very divisive federal representation. Its really hard for them to come together at the federal level within the Congress, within the House of Representatives on what should be done.

Storey: And what's Reclamation's position about the San Joaquin. Of course, we've been *told* . . .to do it.

Glaser: Oh, yeah, we do what the Congress tells us to do. They authorized . . . the federal government was part of the settlement. We were sued, along with Friant, by Natural Resources Defense Council representing a very broad environmental interest. So the federal government was part of the settlement, as was the state. And so we *own* the settlement, and the court validated the settlement and Congress authorized the implementation of the settlement. So now we're authorized and directed to do this. And so what we do is what we always do. What Congress tells us to do we very systematically go about doing our business. Its just a different kind of business. And the really odd thing is generally Reclamation is accepted as the one entity that gets things done. That's why—why would they authorize us to do these river restoration programs? Its because we have systems and processes, *and an ethic*, that says Congress tells us to do it, we will systematically do what the Congress tells us to do within the laws that we must comply with—NEPA, E-S-A, Clean Water Act, cultural resources, tribal trust, and its what we do. And so we're implementing things that people would have never anticipated. And people will generally turn to us—people being through their Congress, to authorize and direct *us* to do it even though it seems so counter-intuitive that we would be going out to reestablish a river we dried up. (Storey: Um-hmm.) Or reconstruct a river that we created downcutting in because of our actions.

Storey: How are we actually going to get the water?

Glaser: Oh, the water is already in the river. We immediately began to release what are called interim flows until we have our permanent flows. And we're using the interim flows to gather data, hydraulic data, biological data, so that we know how to redesign the river. And the water is just not available for allocation. Its not available for consumptive use.

Storey: But presumably . . .

Glaser: Comes out of the project supply, if that's the question.

Storey: Yeah. But don't the people in the project have something to say about that.

Central Valley Project and Two hundred Sixty Contracts

Glaser: Depends on which contractor you're talking about. The funny thing about the Central Valley

Project is you have a score of different types of contracts that we deliver to. Not different contractors. We have two hundred and sixty different contracts. We have contracted water quantities of almost—of over nine million acre feet. (Storey: Um-hmm.) So we have two hundred and sixty contractors to whom we've contracted over nine million acre feet of water. (Storey: That's the entire Central . . .) That's the entire Central Valley Project. That's correct all divisions. So you have these two hundred and sixty contractors, but the two hundred and sixty contractors do not all have the same entitlements. They're (Storey: Or the same interests.) fundamentally different entitlements between all the various contractors. And some of them have priority over other contractors. And the people with the lowest priority would be agricultural water service contractors south of the Delta within the San Luis Unit. That'd be Westlands, San Luis, Del Porto, Patterson, East Stanislaus, etcetera, etcetera. All the west side farmers, generally along I-5 on the west side of the valley. They're the lowest priority, and within their contract there is a shortage provision that say we can short their contracts without liability for all kinds of purposes including to meet regulatory and legal purposes. (Storey: Um-hmm.) So Congress authorizes or we're required to do it under the biological opinion under the Endangered Species Act or for some other reason, then their water supply will be reduced by that quantity.

Storey: So each entity that we contract with, do they only have one contract.

Glaser: Each entity would have one contract as a general rule, but within that contract they may well have agricultural water supply and a municipal and industrial water supply. So they may have two distinctly different types of water. And then within the agricultural water supply they may have as many as five different rates. And then within the M&I they may have as many as five different rates. So we have over two thousand different water rates for the Central Valley Project. So we keep track of the color, if you want to call it [that], the color of water for over two thousand different rates, and then we have to bill by quantity for each of those different types of rates to each of the entities we do business with. That's what makes, by the way, that's what makes the Central Valley Project so different than any other project within Reclamation, because most Reclamation projects would be subject to a repayment contract and it would be with one entity or multiple entities and there would be one payment a year, and they would pay their O&M charges *in advance*, and the accounting for that is relatively simple. We have to keep track of two thousand different types of water to two hundred and sixty different contractors and bill them all separately. Its really strange.

Its very difficult, and I don't know if it's sustainable over time. I don't know if it's a sustainable practice over time. It gets more complicated with each passing year—just keeping track of what the nature of the water is. (Storey: Yeah.) Because within that, then, there are all kinds of deals cut. That is you're one district and you don't have an adequate water supply, but right across the road, literally somebody's getting a 100 percent water supply. That'll happen in the Central Valley both north and south of the Delta. Last year when Westlands or San Luis had a 10 percent allocation, immediately adjacent to them Central California Irrigation District [CCID], another C-V-P contractor, or Firebaugh [Canal Water District] had 100 percent water supply. From the same source. And so they'll cut a deal between them. Westlands will cut a deal with C-C-I-D or Firebaugh to transfer some of that water from one district to the other. And it's a business transaction. And then we have to find a way to accommodate that transaction both physically and as a matter of law. Of

course, we have to do a NEPA analysis on every transaction. And we have to consult under E-S-A . . .

END OF SIDE 1, TAPE 1. SEPTEMBER 3, 2010.

BEGINNING OF SIDE 2, TAPE 1. SEPTEMBER 3, 2010.

Storey: . . . consult under E-S-A . . .

Glaser: Yeah. For any adverse impacts to listed species or their critical habitat. And these aren't just aquatic species. We have giant garter snake which always problematic for us because now many of our irrigation areas are habitat for giant garter snake which are listed. So the issues just sort of go on and on and on. And through all that we have to keep track of that water, and then there are surcharges that are put on those transfers as a matter of law also. Then we have to make sure that its applied to lands that are eligible to receive water under the Reclamation Reform Act or acreage limitation as you might understand it, and so you have *all* of this complexity that goes with the movement of water. And there are one year deals cut, there are one time deals cut, there are multi-year deals cut. The Yuba Accord⁵⁶ would be a multi-year deal—takes water out [of] the Yuba River and moves it through the state and federal pumps on an annual basis. And we have south of delta exchanges, we have north to south exchanges, we have north to north exchanges, and they're all different. But we have to keep track. We have to transact every one of them. Do our environmental compliance on every one. And then keep track of the water and where its delivered.

Storey: What kind of staff do we have to have to do this?

Staffing Difficulties

Glaser: We need excellent staff. (Storey: Well, I know that.) We have probably the largest finance staff of, certainly, any region. And ours isn't large enough, and they don't have enough modern software systems and defined processes to keep up with this. Its just a real struggle to keep up with our accounting requirements. And, of course, you have very high accounting standards, now, that are placed on the United States after all the various scandals that occurred both inside and outside of government as it related to financial practices. So we have very high financial standards today. And we're always—we're audited every year. We're under incredible scrutiny as is every other government agency. But we're always finding little oddities in the way that we do business that we have to go in and clean up as a matter of financial records, and then as a matter of repayment. And so its just very difficult.

One of the more difficult things we face is turnover of staff. Because of the way we do business is so unique to the Central Valley Project that its even hard to bring people from Reclamation in. But we bring so many people into our Region. Its hard for us to recruit from elsewhere in Reclamation because, first of all, it costs a lot to live in California, and people

⁵⁶ "The Yuba Accord includes three separate but interrelated agreements that would result in enhancement of fisheries protection on the lower Yuba River, increase certainty of local supply reliability, and provide DWR [Department of Water Resources] and Reclamation with increased operational flexibility for protection of Delta fisheries resources through the EWA Program, and provision of supplemental water supplies to state and federal water contractors." See "Lower Yuba River Accord EIS/EIR," www.usbr.gov/mp/nepa/nepa_projdetails.cfm?Projects_ID=2549, (Accessed June 2014).

who are from the West don't particularly want to live in California. And they like where they live. You know, its hard to leave Billings and go to California, if you come from the inter-mountain area. I understand that. I come from the inter-mountain area, and its hard for me to live in California. And my home's really here in Denver. And so its hard for us to recruit within Reclamation, and so we hire a lot of people from other agencies, and when they come in they cannot understand the way we do business. See, because Reclamation and the Central Valley Project in particular we're a utility, and we're a cost-of-service utility, and we have very much utility business practices. We have rate setting and we go through rate setting procedures. We have hearings on rate settings. We *market* commodities. We recover all costs associated with the development and providing of those services through rate setting as required by law. And so, our business practices are fundamentally different than, say, when I worked for B-L-M and 85 percent of my costs were labor costs. And we only recovered a very small portion of those labor costs, and we didn't do it through cost recovery. We did it through permit costs. And so the revenues we generated over there were just a hundred dollar permit charge or thousand dollar lease charge. But over here we have to keep track of the water and then bill for the water—just like any utility—only worse than, say, Denver Water here. Denver Water probably has ten rates. (Storey: Um-hmm.) They probably have an industrial rate; they probably have a tiered pricing relative to the industrial rate; they have a residential rate; they have tiered pricing on residential rates that are tiered to block use or something. So they have, maybe, ten rates. Well, we have over two thousand, and its just very, very difficult with the turnover of staff to keep a really reliable business practice.

Now we overcome that just through hard work and determination. That's one thing about Reclamation. It's the most determined organization you'll ever work in as a governmental entity. And that's what gives us both the best and worst reputation of all Interior. The best in that there is nobody that doubts we will get it done if we're asked to do it. The worst being there is no doubt that we'll get it done even if people *don't* want us to do it (Storey: Yeah.) because we have systems and processes to accomplish things. That's what we do. And that's sort of the attitude of the staff, but it takes a while to ingrain that in new people coming in. Some people don't stay very long. We have to work too hard. Its just hard work. Lot of pressure. There's so much going on; you're just daily under a lot of pressure, at every level in the organization. And some people respond really well to that, and they go on to be great, great employees. Some people *don't* respond very well to that, and they'll go to another work environment where the tempo of work suits them better. (Storey: Um-hmm.) And we have people who work sixty and eighty hours a week, every week of every month for the last two and three years. And that's wrong, and that's not sustainable, but its what we must do while we're building up all of our capacity to treat these things more routinely. (Storey: Um-hmm.) And in the middle of this we end up with things like the Department's conversion to the new finance system. So we have to get all of our processes lined up with whatever this processes will *be* for the new finance system. We have a couple years to get that done. And so our staff is not only doing all their regular work, they're also going to all of the meetings for the Department's new finance system to find out what the new requirements are going to be and trying to get our unique requirements recognized in the system *and* coming back and seeing how we can do our work to fit within the new accounting structure that we'll have and the software that supports it. (Storey: Um-hmm.) And that'll be a huge, huge thing for Reclamation *and* our Region. It'll be huge for Reclamation. I think it will be particularly difficult for our Region. And so Reclamation will

spend an incredible amount of money and staff energy making the conversion. Now, it has to be done. F-F-S [Federal Financial System], which is the current finance system, it was put in place when I was the assistant commissioner for policy, budget, and administration. And that was two decades ago. (Storey: Um-hmm.) And so its two decades old, and so you need to replace systems from time to time. Because we ask them to do things today that they were never designed to do. And, but, the conversions are always incredibly difficult. (Storey: Yeah.) So that's kind of in the middle of all of this. Makes for an exciting time.

Storey: And a tough one.

Integrating CVP with the State Water Project

Glaser: It is hard. Its hard for the people that we interface with. Its hard for our water users. Its hard for the environmental community. Its hard for the fisheries interests. Its hard for the tribes. Our relationship with the state of California is very difficult because we cost share so much with them. Another thing that's unique about the C-V-P, the Central Valley Project, is its integrated with the State Water Project as a matter of law. There is a agreement and an act that requires the coordinated operation of those two projects. (Storey: Um-hmm.) So you have a state project and a federal project that are integrated, not integrated, coordinated. But in many ways integrated. And they're subject to their own state laws, and we're subject to our own federal laws. (Storey: And so, for . . .) And it makes it exceedingly difficult. But what makes it *more* difficult is we have cost sharing arrangements and we're financially integrated because we each own half of San Luis Reservoir and the pumps that put water into San Luis Reservoir and the forebay, O'Neill. And because of that we have shared costs there. And so we're integrated financially. And so we have a cost share agreement with the state that allows us to manage each other's share of costs between the two projects, and we're required to get the state to cost share certain actions that we take—whether its fish screens or barriers in the levee—we're prescribed by law—the new Red Bluff Diversion Pumping Plant and Fish Screen requires a 25 percent state cost share, as a matter of law. Well, you know, California is broke, and so they don't have any bond authority right now, and the governor has shut down their expenditure in certain areas. And so they have a very difficult time meeting their cost share obligation, which as a matter of law makes it very difficult to do things we're directed to do because it requires a cost share. And it just goes on and on.

Storey: Is there state water going through reservoir?

Glaser: No.

Storey: It comes in below there? Why are they cost sharing, then. I don't understand that.

Glaser: Well, because Red Bluff isn't about providing water. There is a facility there to provide water—a diversion structure.

Storey: A diversion facility.

Glaser: Yeah. Red Bluff is about *fish* passage. As so the reason that we're taking the diversion

structure out is to allow for fish passage. And the fish are endangered, and the state does have an interest in these fish. (Storey: Um-hmm.) Both as a fishery, but also as something that affects their state water supply [in] the State Water Project. Because they have biological opinions to address the impacts of their projects on these listed species, just like we do, in fact, we consult on their behalf under E-S-A. When we consulted on the state and federal project with NOAA [National Oceanic and Atmospheric Administration] Fisheries and Fish and Wildlife Service on listed species, the state wasn't allowed to be in the room. They aren't a consulting party. The federal action is what required consultation under Section 7 of the Endangered Species Act so we consulted on behalf of the state. They didn't like that very much. But Red Bluff Diversion is required under the biological opinion. Its also authorized under C-V-P-I-A. (Storey: Um-hmm.) And it has a 25 percent cost share.

Storey: So how much of the water supply, you know, you've said they're up to 45 percent south of the Delta now. How much of that . . .

Exchange Contractors

Glaser: Just direct water service. Like I said, the exchange contractors they got a hundred percent water supply. Friant Class 1 south of the Delta they got a hundred percent water supply.

Storey: What's an exchange contractor?

Glaser: The exchange contract is kind of an interesting thing. I was telling there's all of these different classes of contracts. These different nature of contracts we deliver water to. Well one of them is called the exchange contractors. And the exchange contractors were the service are that were the *first* irrigated agricultural farms on the San Joaquin. And they're generally north, or down river, because the San Joaquin runs north, so they're generally north or downstream from Fresno. And so they were there pre-project. (Storey: Uh-huh.) So when we built the Friant Division we were going to interrupt their water supply. (Storey: Right.) And so they gave up their water rights in exchange for an assured water supply from the Central Valley Project. That's why they're called an exchange contractor. And they receive that water as if it is run of the river water. So they pay nothing for it. So we deliver them 820,000 acre feet of water a year at a cost of probably a hundred dollars an acre foot. So that's, probably, \$80,000,000, I think, and they don't pay for the cost of that water. Friant pays the cost of their water because the Friant Division benefits from the exchange contractors giving up their water. So the exchange contractors no longer take their water off the San Joaquin River. They get their water through the pumps, just like Westlands or San Luis or Patterson or Del Porto. Just like ag water service on the west side they just get the first water that comes through the pumps.

Storey: And in effect, they have priority number one.

Glaser: Yeah. They get the first water that comes through the pump. And if we can't satisfy the exchange contractor water *entitlement* through the pumps then we have to put a call on Friant to provide the exchange contractors—their water off the San Joaquin. So they have this unique contract. There're settlement contractors on the Stanislaus River—that is below New Melones Dam. And we provide the first 600,000 acre feet of water out of the Stanislaus to

them. There're settlement contractors on the Sacramento River, called the Sacramento River Settlement Contractors, and we provide the first 2.2 million acre feet of water on the Sacramento River to the settlement contractors. And we have to satisfy *all* those interest before we can make *any* water available to agricultural water service contractors.

Storey: So that 45 percent *includes* the . . .

Glaser: Its *after* all of the other water is delivered.

Storey: Oh. Okay.

Glaser: You deliver in order of priority.

Storey: Right. So, how much of that 45 percent allocation this year, if that's the right term, (Glaser: Yeah.) is a water supply issue as opposed to a legal issue with the pumps in the Delta?

Glaser: Very good question. Everyone asks that all the time. You know, because the water users, if you go drive down I-5 you're going to see big signs that say "Congress created drought." They're saying it's a regulatory problem. They're saying its all about the Endangered Species Act. They would like you to believe that its about the delta smelt. Because it's a great story if its about a two inch fish. They forget about all the salmon runs. They forget about steelhead, green sturgeon, and a host of other issues. To them, the want it to be about the smelt. (Storey: Um-hmm.) Because it makes a better story.

Storey: And because they think its insignificant.

B-2 Water

Glaser: That's right. Its, if you remember back to Tellico Dam for T-V-A at the very beginning of E-S-A, it was the snail darter. Well the snail darter--this is the Central Valley Project snail darter. And so they want you to believe its all a regulatory issue, and we can just turn it off. And then there are others that want you to believe that E-S-A doesn't have much to do with it. Its really about hydrology. And the truth is its in between. That it is about a whole set of public decisions that have been made over the last quarter of a century. And what does that mean? When the Central Valley Project Improvement Act passed in 1992, Congress decided at that time that we had taken too much water out of the system, and ecologically we were killing this incredible resource the Sacramento-San Joaquin Bay Delta system. And so they directed us to put 800,000 acre feet of project water back to environmental purposes. Its called B-2 water. Because that's the section of C-V-P-I-A that covers that. And so the first water was 800,000 acre feet that went to the environmental system. And we still provide 800,000 acre feet *a year* to various environmental *needs* within the Sacramento-San Joaquin Bay Delta system. Also as part of C-V-P-I-A Congress decided that the refuges, there are a lot of wetlands both north and south of the Delta, historic wetlands, most of which have been dried up. But there're still very large remnant wetlands. And there's a very large Pacific Flyway migratory bird migration. There's the Central Flyway. There's the Pacific Flyway. And birds migrate north and south on the Pacific Flyway, and they relied on these wetlands in the Central Valley for their north and south migrations. And so if you go out to California,

you're going to see incredible numbers of migratory bird related species.

And Congress decided that we needed to provide a reliable water supply to the refuges. And so Reclamation has a contract with state refuges, federal refuges, and private wetlands to provide them a water supply. And that's a fairly firm water supply. Its as firm as the senior water rights holders: the exchange contractors, the Sac River Settlement Contractors. And so that was nearly 400,000 acre feet of water. So there's 1.2 million acre feet of water that came out of the water supply for the Central Valley project. And *then*, like I said, in 2000 we signed a record of decision on the Trinity, and we leave between 300- and 600,000 acre feet of water in the Trinity River every year that used to be exported. And so now you have, on average, say 400- or 500,000 acre feet of water that's now left in the Trinity. And *then* we had the San Joaquin Settlement Act that passed in 2009, and *from that* we leave about 200,000 acre feet in the San Joaquin. So now we're up to about two million acre feet of water that used to be available to the project that is now, because of law, not even anything to do with E-S-A, but just as a matter of law, Congress has redirected the use of that water. And you lay on top of that the restrictions for pumping because of all of the species that are imperiled both resident species like the delta smelt and anadromous species like the runs of salmon, steelhead, green sturgeon, . . . if you add that water in on top of that, it depends on the water year what the impact was. And, for instance, in 2008 the impact was almost all drought related. In 2009 the majority of impacts were drought related although it did rain in March, April, and May, and we did have to leave certain water in the river for the fish. But I would say at *that time* you're really talking about 75 percent drought, 25 percent regulatory impact.

This year [2010], a lot of it is drought related because it did not rain in October, November, December, and January, which is late fall early winter, and it's part of the rainy season. California has two seasons—when it rains and when it doesn't. And it generally starts raining in October and rains until late March or April. Then it quits raining and doesn't rain again, not even afternoon showers, you would find it strange. You get up every morning. Its blue sky and still all day long, and it gets up the next morning and its exactly the same. And that's generally from May to October. (Storey: Um-hmm.) And so it didn't rain in later fall and early winter *this* year, and it rained a lot in March, April, May, and June, and our most restricted time for pumping is March, April, May, and June. And so when the water was naturally there a lot of water was left *in* the Delta and outflowed to the ocean. So I would say this year 50-50 if you say they got a 45 percent water supply so the 55 percent that they did not receive under their contract half of it was drought related, half of it was regulatory related, but you have to remember this is based on a backdrop of two million acre feet lost to the project through all the other actions.

Now, personally, as the regional director, I have to have no values on this. I can't go in and think that leaving the water in the system is good or bad. It just *is*. Its what Congress directed us to do. I can't decide whether—I can't be influence by how I feel about the Endangered Species Act and society's choice between endangered fish and agricultural water supply. If I get into sort of laying my values over the top of what Congress has established as our nation's priorities, our national values, then we're lost. You know, my job is to take the laws as they're provided, look at my obligations *under* the contract, and to the extent that I can, *under the law*, satisfy our obligations as a matter of contract. And its simple as that.

(Storey: Um-hmm.) And every day you have to go in with that mindset. And that's hard. I have a lot of employees that feel very strongly about one side or the other on this issue. And it makes their job harder, and it makes my job harder because our job is to look at the directives of Congress, our obligations as a matter of law, state and federal, because we have all of these permits from the state for the use of water. We have twenty-some permits on the State Water Project, water right permits. And they have incredibly specific and numerous conditions that says you can take these water *if* you meet all of these conditions. So we not only have what the Congress puts on us as a matter of law, and what we must do under the Endangered Species Act and the Clean Water Act, as part of our federal permitting, but we also have all of our obligations under our state permit, and it has flow requirements, it has water quality requirements.

Dynamics in Operating the CVP

And so we have to look at hundreds and hundreds and hundreds of legal obligations to determine how we operate the project. And its incredibly dynamic. And that's why in February its really hard to say what our water supply is going to be, and its getting harder every year. By the way, to give you an *extreme* example, this last year in February we told agricultural water service contractors north of the Delta, the biggest one would be Tehama-Colusa Canal Authority, who diverts out of Red Bluff, by the way, they're the biggest north of [the] Delta ag service contract, but they're not the only one, we told them in February that their allocation was going to be zero. And so they're having to decide how much rice they're going to plant, how much water they're going *to buy* to cover the needs of their almonds and their olives which is predominantly their permanent crops that they raise north of the Delta. In February they have to decide that because they need to get enough water to cover their permanent crops at a minimum. And they raise very high value short grain rice, sushi rice as you'd know it, sticky rice. That sticky rice, they raise that short grain rice, very high valued. In fact, most of it they raise for export to Japan for sushi or central Europe for sushi. (Storey: Really.) Yeah. And so I've been to rice mills where the rice has gone through its milling and grating, and its going into the rice sacks for delivery, and they will have various Japanese labels on them. I mean, they're sacked right into Japanese commercial product labeling. (Storey: Right.) And then they're just shipped out through the port . . .

Storey: So that's why they have to make their decisions in February.

Glaser: Well, they plant early, see . . .

Storey: So the water comes later . . .

Glaser: We tell them zero. In May we'd upped their allocation to 100 percent. Well, they can't put that water to beneficial use. Now . . .

Storey: Because its too late to plant rice?

Glaser: Sure, they've already gone out and bought water to support their permanent crops, and they've already decided how much rice they're going to plant. And so we give them a 100 percent, and they can't store that water. There's no way for them to store it. And so they get

an allocation of 100 percent, but they may be able to use only 50 percent of it. And that's a new phenomenon. We have not historically had that problem.

Storey: And can they do, I don't know if exchange is the right word, . . .

Glaser: No, they can't transfer the water because its too late. Because south of the Delta they raise tomatoes and melons and lettuce and broccoli. They raise—half of their lands are in permanent crops: almonds, pistachios, pomegranates, grapes, table grapes and wine grapes, asparagus, permanent crops. Half of their land they leave fallow because they don't know what the water supply is going to be so they can't over-commit because they know if they don't get an allocation they have to go out and buy water to keep their permanent crops alive because they've got twenty thousand [dollars] an acre invested in it. So they try to find a balance between permanent crops and row crops—one year annual crops. But if they're going to raise tomatoes, which is a very, very high valued crop, canning tomatoes mostly, then they have to order their nursery tomatoes in February and so I come out in February and tell them their getting zero, and you're a farmer and you're going, "I know they're going to up the allocation. They always do." Every year except 2008 it went *down*. And by the way we left 200,000 acres of tomatoes that they plowed under. 200,000 acres of tomatoes got plowed under that year because . . .

END OF SIDE 2, TAPE 1. SEPTEMBER 3, 2010.

BEGINNING OF SIDE 1, TAPE 2. SEPTEMBER 3, 2010.

Storey: This is tape two of an interview by Brit Allan Storey with Donald R. "Don" Glaser on September 3, 2010.

Glaser: So every year allocation went up, but in 2008, and so they bet on that, in 2008 the allocation went *down* and they stranded 200,000 acres of tomatoes—just had to plow them under. And so, they're sitting there in February with a zero allocation knowing they have to cover their permanent crops *and* trying to decide if they're going to plant any row crops. Well, they don't plant very many row crops because they have to order their nursery tomatoes in February just like you have to order seed if you're going to be a dryland farmer here. (Storey: Yeah.) And so they can't push that button. First of all they can't borrow the money to do it. The bank won't loan them money. What bank's going to loan them money, particularly after the crash of all the homes and everything else in the country that put us in this financial strait we're in—what bank's going to loan them money if they got a zero allocation and they want to borrow money to buy nursery stock *on* the come. (Storey: Um-hmm.) And so financially its just killing them—making financial decisions.

And that's something we have to fix. We have to find a different way to make our allocation decisions, but we can't just change our practice because we don't know what's going to happen with the weather between January and May, which is when most of the water comes—January to May. We don't know what's going to happen there. So we can't tell them something that's not based on all historic data that we have. What we do, is we look back a hundred years to figure out what's going to happen this year. And we model that. (Storey: Um-hmm.) And so what we're going to have to do, is we're going to have to go put some institutional processes in place, transfers, exchanges, source shifting, and *other* things

that allow us to make an allocation sooner. And if then it stays dry, we can go and implement all these other actions to move water to where its needed. But everybody hedges because the people who have the water, it has value, and they don't want to give it up too soon because they won't get the best price for it. And the people who are most vulnerable, they want as much security as they can, but they don't want to over-price, over-buy the water. The water market, some of this water is going for \$4 and \$500 an acre foot. And raising an annual crop, or even raising almonds won't support \$500 an acre foot water. But they buy it because they have to keep their almonds alive for one more year. Its just a decision to them—I buy \$500 water instead of losing \$10,000 in investment in my orchard. (Storey: Um-hmm.) And that's the way people farm in the valley today.

Now, some people up here in Montana, who are dry land wheat farmers, you'd say, "Well we live with that every year. We didn't have any assurance it was going to rain, we just looked at what happened historically, you made your best economic decision, and you went forward. Some years it was a bumper crop, and some years it was a *bust*. Some years we didn't get a good enough crop to combine. So what's the deal?" Well, the deal is that was the business model on the High Plains. Its factored into the value of land, its factored in the return on investment. Well, in California everything was predicated on a relatively reliable water supply. So that's factored into the value of the lands, its factored into their return on investment. Now when the water supply goes down and becomes less reliable just like housing prices, they have to crash. Everybody loses everything. You establish a new floor, and you'll have a new business model. (Storey: Um-hmm.) But in the meantime you have a whole lot of people that are really hurt. Farm labor, small farm owners, small communities.

Storey: I think I read a news about wells—and Reclamation, I mean.

Groundwater Issues

Glaser: Yeah. You can write that story a lot of ways. (Laughter) On the west side of the valley in particular, these water service contractors, the water service contracts, and the law itself. The San Luis Unit, if you go read the act, it was a supplemental water supply. It wasn't a primary water supply. It was a supplemental water supply. (Storey: Um-hmm.) And it was intended to supplement the use of groundwater. Because they'd used groundwater forever out there. They'd used it to the point that they were having problems with land subsidence. And they have areas that have subsided fifty feet. (Storey: Um-hmm.) Now if you can picture *all* the land, as far as you can see, has settle fifty feet. It is now fifty feet lower than it used to be. Some of the canals that were built in Central California Irrigation District service area—the Mendota Pool, I understand, on the San Joaquin River, now this is a diversion dam *on* the San Joaquin River has subsided eleven feet. So that means the *whole river*, everything around, the pool, all subsided eleven feet. Well, it's a turnout into a canal. Well, the headworks is eleven feet lower than it used to be. Its really hard to get that water to run uphill that eleven feet. (Storey: Yeah.) And so some of their canals no longer run the direction they used to run. They actually run the water down the river, put it in a canal, and run it backwards in the canal because of subsidence.

Well, people are really concerned about this subsidence out there so we put in this San Luis Unit to provide supplemental water. And that was to keep them from over-pumping

their groundwater. Its called mining the groundwater. Because a lot of these, when the ground subsides, actually what's happening is your dewatering the aquifer and then it collapses, and it will *never* take water again. It'll just never take water. And so when we put the San Luis Unit in and they were getting a 100 percent water supply most years, and then when it got real droughthy and the water wasn't available, then they would pump. And they pumped *a lot* the last three years. So how'd they get by on 10 percent or 25 percent or 40 percent, they pumped. And they've been pumping about 500,000 acre feet of water, which is a quarter of their water supply. So 25 percent of their water supply has come from pumping. Well, actually, *half* of the water that was available came from pumping. The problem is the safe yield of their wells is only 200,000 acre feet according to their estimates—this is Westlands. So they've been overdrafting or mining by 2 or 300,000 acre feet of water a *year* and now we're starting to see land subsidence again. And so you can only solve the problem so much with wells. Wells are part of the long term water supply, but they have to be managed within the safe yield of groundwater. The problem is in California groundwater is not regulated. So, if you have the deepest well, and its on your property, you can pump. Your neighbor can come in right next to you and put a deeper well and dry your well up, and you have no recourse, except to put your well down further. (Storey: Yeah.) Or find an alternate source of water.

Storey: But, you know, I read these news stories sort of fast, because who has time to read them all, (Glaser: Not me.) and . . .

Glaser: Your see my briefcase—this is my weekend reading. (Storey: Yeah.) I must have 2,000 pages of stuff to read over the weekend, and I'm the world's slowest reader, by the way.

Storey: I'm not very fast myself. But I thought I read that Reclamation had financed some wells.

Glaser: We did finance some wells. What we did, with the Recovery Act⁵⁷ money that was made available by the [President Barack] Obama administration *and* the Congress this past year, was called the *stimulus* money, (Storey: Yeah. The A-R-R-A . . .) we went in and we did a number of things in California to respond to the drought and to meet other critical water supply needs we had out there. Well, one of the things we did is we set aside, Reclamation set aside \$40,000,000 to provide drought relief. And that money was allocated up to various drought relief measures.

One of those drought relief measures was to drill temporary wells. Another one was to put down temporary pipes and pumps. And so if you go in certain areas in the valley you're going to see all this white pipe just laying on the surface. That was probably paid for with Recovery Act money under the Drought Relief Act. And its just temporary. Now at the end of the drought that pipe will be picked back up, but part of the money was spent on wells. Now we just couldn't put a bunch of wells down. We actually had to go out and investigate the appropriate places to put these wells. So we put out a solicitation for interest in money for wells for drought relief, and then as money put in their submissions, we made the districts do it and not individuals, that way we'd get collective submissions. We had somebody work with. Then we had to go out and investigate *each* well location to make sure that the yield from the wells would be sustainable. And so some wells we approved and some we did not.

⁵⁷ American Recovery and Reinvestment Act of 2009.

(Storey: Um-hmm.)

Water for Refuges

And some of the wells are substitution wells. Remember the refuges I was talking about that get refuge water? (Storey: Yeah.) We went in and we put in a well near the refuge to pump water out for the refuges, and in return they would free up a portion of their C-V-P water supply they were entitled to from the canal, and then that water was available for agriculture. So you go, "Well, why would the refuges do that?" Because they were usually, like, three for two deals. You give up—you pump three acre feet of water and give up two acre feet of water so the refuge got more water supply, and ag had more water supply. (Storey: Hmm. That's interesting.) Some of the exchanges are done that way too. Right now we're looking at an exchange between Westlands and Metropolitan Water District. What's happened is we allow our west side contractors to store water in San Luis Reservoir. Store *their* water. They can either conserve water from one year and carry it over, and then use it in the next year. Its to encourage them to make the best use of their water. That's called rescheduled water—its rescheduled from one year to the next. Or, they can go *buy* water from somebody else non-project water, and store it in San Luis under a Warren Act contract, and so we have about 350,000 acre feet of water in our half of San Luis that belongs to the water users—not to us. Well, our share of San Luis is a million acre feet for a third of the space is filled up physically with somebody else's water—other rescheduled water or Warren Act water. And, if we can, we're going to *fill* our million acre feet of San Luis, and that means their water gets spilled, and so they're looking, right now, at how much water we have in the system, and we will probably—there's a *high* likelihood that we will spill at least a hundred thousand acre feet of that three-fifty, and there's a *good* likelihood we'll spill all of it. So, of course, they're now trying to get it out of there and put it somewhere else so that they don't lose it. This water they want to use next year. And so they're cutting a deal with Kern County, with the Kern County Water Bank and with Metropolitan Water District to move this water to the Kern County Water Bank *or* to Met's [Metropolitan Water District] Diamond Valley Reservoir.⁵⁸ You know, physically move the water out. (Storey: Um-hmm.) And then they'll—for every three that they send, they get two back next year out of Met's or Kern's State Water Project supply come through the pumps. So they don't have to physically move the water back they exchange three acre feet this year for two acre feet of *new* supply next year.

Storey: That would come down the canal.

Glaser: Yeah, that comes down the canal through the state's facilities. So we're working on those deals right now. You go, "Well that sounds cool." And it is, those are the things we *should* do to make the best use of the water. The problem is every time the water moves it costs money. Its going to cost a lot of money to move water. So they have to—they've already paid to get the water in the reservoir. Now they have to *pay to move* it. And then they have to *pay* to get it back, and this water that they bought is getting incrementally more expensive, and so it may cost a hundred dollars an acre foot for them to protect this water, and they'll just have to decide if that's smart. (Storey: Um-hmm.) Otherwise they'll just take the water

⁵⁸ Diamond Valley Reservoir is a Metropolitan Water District facility located near Hemet, California, in Riverside County.

out and spread it. Put it into the soil profile because they aren't going to lose it. (Storey: Yeah.) And we don't want them to just take the water and spread it because that won't be the best use of the water. And so every day this is what the staff is out there working on. And, of course, everybody looks at the deal and characterizes whether it's a good or bad deal—all the people on the outside who care about the C-V-P. All the environmental community, all the members of Congress, all the other water user entities, Hoopa Valley Tribe. I meet, with the Hoopa Valley Tribe every other week, about. And for the last two or three times I've met with them, they have expressed great displeasure about this deal between Westlands and Metropolitan Water District. Because they think Westlands and Metropolitan Water District dewatered the Trinity and killed all their fish. And they think we don't do the best job of protecting their interests. And they come every other week and explain that to me.

Storey: Well, speaking of the river restoration, what role does the state have in this because, you know, state water law governs us (Glaser: Um-hmm.) and we're taking water away from ag putting it into environmental—you know where I'm going, right?

The State of California's Role in River Restoration

Glaser: Um-hmm. Yeah, you know, I mentioned our twenty some permits that we have with the state—water rights permits for operating the Central Valley Project, and among those are water right permits for instream flow. We have to go to the state, the State Water Resources Control Board, and we have to petition them to allow us to release this water *and* to have as a condition of our permit that the state will protect that for instream flow purposes. Now, in California instream flow is a beneficial use of water. And so we, right now, have a petition before the California Water Resources Control Board for our interim flows for the San Joaquin River Restoration Program that will begin on October 1, 2010. We're getting one year, these are interim flows, so we get our permit for one year at a time. Eventually, when we understand everything on the river and we can go in, we will request a permanent right to use that water for instream purposes. Right now we do it once a year. And so between now and the end of the month the state will have to grant us a permit to release that water for instream flow, under certain conditions, or we won't be able to release the water on October 1. We just won't release the water. Won't have a right to do it.

The same on the Trinity River. When we finalized our record of decision and established the flows on the Trinity River, we went to the state and petitioned the state to have that water remain in the Trinity River for beneficial purposes. Course all the water users protest, and the state has to hear all the protests and they put conditions on our permit, but in the end they granted the permit. Otherwise we could not release the water.

Storey: It would seem to me that under prior appropriation law, the irrigators would have an argument that might carry weight.

Glaser: Not here, because Westlands Water District has no water right. The federal government has the water right. They have a contract for delivery of a portion of that water right under specific conditions. So Westlands has no water right.

Federal Government Water Right

Storey: Its Reclamation that has the water right.

Glaser: That's correct.

Storey: So what we . . .

Glaser: Now that's not the case with everyone we contract for water with. The Sacramento River senior water rights contractors, the settlement contractors, they maintain their water right, but they subordinated their water right to our storage and delivery of water, and we have a contract with them that says in return for that we will give them water under these conditions.

Storey: What about the exchange contractors?

Glaser: The exchange contractors gave up their right.

Storey: In return for . . .

Glaser: In return for a guaranteed water supply, including a call on the San Joaquin on the Friant Unit if we can't supply their needs out of the pumps. (Storey: So Reclamation . . .) So each one is different. That's why I was saying you have all these different arrangements because there were deals struck at different times under different conditions. But that's why the ag water service contractors supplemental water shortage provision, it's a federal water right, and it's subject to all regulations, and we can short them under the contract. That's why they never sue us when we give them a zero a ten percent. That's why they have to go to court and sue us over *something* else. They sued us over the application of the Endangered Species Act. They sued us over the fact that we didn't do NEPA compliance on the reasonable and prudent alternatives under the biological opinion, but they didn't sue us over their right to water. They had to use us over our administrative functions that we were carrying out that impacted them adversely.

Storey: Now I read, I think it was this week or last, another news story about "We've got to build Auburn to protect Sacramento." And we had our water right taken away recently.

Glaser: Well, they didn't renew our permit. (Storey: Is that what it was?) Yeah. The funny thing is we don't really have a water right for any C-V-P use of water. What we have is we have a permit issued by the state board and the permit is for a period of time. And so, and many of our permits have expired, by the way. That sounds bad when somebody told me all our water right permits for the C-V-P expired, I thought, in the '80s, in the 1980s, I thought this couldn't be good. (Storey: Um-hmm.) And it's really not good, but it's not as bad as it sounds either. Because what a water right permit allows you to do, it's probably a water use permit, it allows you to use the water under very specific conditions while the project is developing. And so they may grant us a permit—remember I had said we'd contracted for nine point two million acre feet of water—we only deliver about six million and change on average. We used to deliver around seven million, but now it's down to about six point two or something. So there's three million acre feet of water we don't deliver that is actually permitted under a state

permit. And that's because water supplies have never developed. Auburn South Unit of the C-V-P never developed the way we anticipated. We had the Auburn South Canal that comes from Folsom and head down towards Elk Grove and further south towards Calaveras County. And that area never developed because Auburn was never built and so there really isn't a water supply to put down the Auburn South Canal.

So our permits are for a period of time, and the period of time is to allow us to *fully* develop the project and determine what our water *need* is under the permit. And then you go to a process where you get a license, and the license would be equivalent to what you would think of as a water right. (Storey: Um-hmm.) Its permanent, and its for a specified quantity of water. Well we've not gone through licensing on any one of our permits on the C-V-P. A funny thing about the C-V-P—and I don't even know the consequences of this, but its really important, whatever it is. The C-V-P has never been declared complete. So we've been building the C-V-P since the 1930s, and the C-V-P has never been declared complete. Central Arizona Project, which started in the '70s its been completed and declared complete. The Northern Colorado Water Conservancy District and the Colorado-Big Thompson Project, which started in the '50s,⁵⁹ its been constructed, and its been declared complete and put into repayment. C-V-P project has never been declared complete, and our water rights permits have never been heard and converted to a license. So all our *permits* expired. But our right to use the water did not disappear. We would have to go through a licensing proceeding to determine what our entitlement to use water is. But there is a question on whether or not we can come in and claim water that we put to beneficial use as a right to go to license in the last twenty years. Now that would be really important except for the fact we haven't put much new water into use in the last twenty years. Just haven't done it. So our high water mark, was probably, for use of water, may have been back around 1988 or 1989 anyway.

So there's a question, and we're working this out with board staff today, whether they should extend the permits. We asked them to extend the permits to 2030, and they had to publicly announce that, and everyone went crazy, everyone who don't like the C-V-P sort of went crazy that we were asking the board to extend our permits to 2030 at the current quantities. But it was a procedural thing. But people who don't understand, including members of Congress. We got scathing letters from members of Congress saying this is the stupidest thing I've ever heard. Don't you understand the Delta's in collapse, you can't provide a water supply. Why are you insisting, you know the permit on the Trinity River allows us to divert in the Sacramento. We were intending them to extend that permit for the full quantity of diversion even though we send half the water down the Trinity River. It was a procedural thing, but in the papers it was spun in a way that it made us look sort of idiotic—clueless, not idiotic. Clueless to what the modern contemporary issues are relative to water in California. And that's because the state failed to extend our permits in 1988 when we asked them to, and then we weren't diligent for twenty-two years about getting them to extend our permits. So in 2008 when I asked them to do that then the proverbial fan was

⁵⁹ Construction began on the Colorado-Big Thompson Project in the 1930s with construction of Green Mountain Reservoir on the Blue River south of Kremmling, Colorado. This was the water committed to guarantee water supply meeting the rights of West Slope water users in Colorado as insisted on by Member of Congress Ed Taylor. Most work on the project was undertaken in the 1940s and 1950s. For more information, see Robert Autobee, "Colorado-Big Thompson Project," Denver: Bureau of Reclamation, 1996, www.usbr.gov/history/projhist.html.

squarely hit.

Storey: And that's what happened at Auburn—they said "no."

Glaser: Auburn we had a *permit*, and it's for a period of time, just like all our other permits. Well the period of time for the *permit* expired. It was twenty-five years, probably. And at the end of the twenty-five years we went in and requested them to extend the Auburn permit. And the board looked at it and said, "We see no indication . . ." We just wanted to extend it another ten years or twenty years, or whatever it was so that we could have an opportunity to see if Auburn was going to ever develop. And the reason we wanted to extend it is because our priority date for water starts with the date you were granted a permit. So what happened on Auburn is we can always go in and request a new permit, but the priority date for the diversion and use of that water will now be 2015, instead of 1972. And everything that's developed between 1972 and 2015 will be senior to us. (Storey: Um-hmm.) So that's what really happened. And the board looked at it and said, "Yeah, we see no indication on the record that there's any serious interest in ever building Auburn, including the fact you built a new permanent pump station right in the damsite to pump water to Placer County." And everyone of these becomes a story, and people will tell whatever story they want to tell. (Storey: Interesting.) It really is interesting.

"People Will Tell Whatever Story They Want to Tell"

I've read two books, two biographies on Joe DiMaggio, you know, what's this have to do with California water and the Bureau of Reclamation? Well, if you read these two biographies on one of the best know men in the country from 1940 to, even, 1980 and '90, you would think we would know something about the person. If you read these two biographies you would be sure that they were biographies on fundamentally different people. The one would have *nothing* to do with the other. (Storey: Um-hmm.) And that's sort of how it is with Reclamation. You know, Reclamation is what Reclamation is. Our record stands for itself. What the Congress has authorized and what we've built is a matter of record. But just go read something like *Cadillac Desert* or *Crossing the Next Meridian* by Charles Wilkinson or something on the other end that talked about the great—any book on building of Hoover, and you would wonder if these people are talking about the same Reclamation program, the same Bureau of Reclamation, the institution. You would never know—anyone picking them up randomly—would be how can you have this much difference in perspective of what a public agency *did* that did it right in front of the world that left lasting monuments to whatever we did, good or bad, how can you not see that sort of in the same lens. And that's because as a country, more than maybe any other country in the world, the United States because we're so free to hold our own opinion and our own set of values, that everybody views what its done through their own value system. And they're free to do that. And so, as a public agency, and I go back to my statement that my job every day is to do my job sort of . . .

END OF SIDE 1, TAPE 2. SEPTEMBER 3, 2010.

BEGINNING OF SIDE 2, TAPE 2. SEPTEMBER 3, 2010.

. . . what I was saying, you know, is my job is—and I've heard one of the ranking people in

Interior use this term, and I blanch every time he says it—but its probably actually true. You know, my job is to look at our program sort of agnostically, you know, I look at it sort of unburdened by all my own values—because I have values. I'm a rural westerner. I lived on the Huntley Project in Montana before I even knew there was a Bureau of Reclamation. I knew there was a Huntley Project. Didn't quite know why it was called Huntley Project, but I knew it was called Huntley Project, because it supported this agricultural production, diversion of irrigated hay and corn. So I have my own values, but *my responsibility* is, my job is to pretty much check those at the door when I go to work and look at what the Congress directs me to do, what I'm obligated to do as a matter of law, what my contracts obligate the United States to do, and to consider the values and interests of the public at large. I have obligations to Native American tribes through the secretary's tribal trust responsibility and our fiduciary responsibility for their trust resources. You know, there are all these responsibilities that I have as a public official, and my job is to carry those out to the extent I can without infusing my own value system on top of that. (Storey: Um-hmm.) And it's a very hard thing to do. And there are a lot of days I'm *not* successful. There are a lot of days that I'm very upset by decisions I have to make. I just think they're not in the public interest—not the public interest as *I* view it. But its what I'm directed to do by the Congress. You and so I can't. . . I'm certainly entitled. I'm an American, and I'm free, and I'm entitled to my own opinions and values. But, *as a public servant*, my *responsibility* is to carry out the interests of this nation as prescribed by the Congress *and* as directed by the administration—*whatever* administration. They establish the policies. That's why we elect a president. That's why they get to appoint a cabinet. That's why they get a *thousand* positions they get to fill politically—because they get to put in place the policies of the administration, and the president's accountable to the American people every four years. (Storey: Um-hmm.) And its not my job to substitute my value for theirs. If I want to do that, I should give up my career job and go take a political appointment—which I've been asked to do. I've chose not to do that. That was my choice. Now, if I would of *chose* to take a political appointment, I *still* wouldn't have been allowed to carry out my own values, because I would have had to carry out the values of the president and that administration. That is my responsibility. (Storey: Um-hmm.)

But that doesn't mean some days it isn't hard. Because I will go out and see something we're doing, and in my heart I will believe its fundamentally wrong. But I have a choice. My choice is not to not do it. Because that's what I'm directed to do by the Congress and the policies [that] are prescribed by the administration. So its not my choice to not do it. My choice is to leave Reclamation and do something different, *or* to stay at Reclamation and do the very best I can to carry out those programs as authorized by Congress under the guidance of whatever administration I work for. And I left government one time. You know, and I had great jobs. I left with no remorse. It was a stupid decision, by the way. (Laughter) In that financially it cost me dearly. But, you know, it wasn't that how could I be unhappy in going back into the '90s. Gees, I was deputy commissioner in Washington, deputy commissioner in Denver, got to be state director for the Bureau of Land Management. Got to act as assistant secretary for water and science. This person with very few skills, not much education, but just a hard work and commitment to public service and that served me well, and I had great jobs. Any one of my jobs would have been a career job. Many people aspire just to be the regional director for the Mid-Pacific—*any* regional director. And if you achieve that, that will be the pinnacle of your career—the pinnacle. But I've had the great

honor to be a regional director; a deputy commissioner, a deputy commissioner here and in Washington; assistant commissioner for resources management setting resource policy for Reclamation; assistant commissioner for policy, budget, administration; a deputy regional director in Billings; state director for B-L-M—what a *great* career. Any one of those a great career job. And so I look back as a very blessed person.

Difficulties in Fulfilling Obligations

But it doesn't mean that sometimes it doesn't get old. (Storey: Yeah.) And you will see people that will leave government at the top of their career. Career guys that leave government at the top of their careers, and you say, "Wow, how could they make that decision?" Well, sometimes the job just gets too difficult to perform every day. Either what you're being asked to do gets so unaligned with your values, *or* the job is so conflicted internally and externally that sometimes you just get tired. But it affects different people differently. A lot of my friends have left Reclamation at the end of great careers very, very tired people. And you see them two years later, and its like they've been reborn. You know, its just hard work, because we're at a very conflicted time in every office at every level. Very conflicted. We're asked to do more relative to operation, maintenance, and use of water; more environmental activities with less money—every year. And it isn't that we can choose not to do that stuff. We just have to find more efficient and effective ways to do it, and you're pushing the envelope every day to find those things. And your staff is feeling that pressure because they have comfort zones. And our staff gets pushed out of their comfort zones every day. Transactions in the Central Valley Project—the Central Valley Project Improvement Act gave us a lot of authority to do transfers and exchanges. It encouraged the highest use of water. But I have staff that hates transfers and exchanges. They hate the practice of rescheduling water because we lose control over the allocation and use of our water. And they think its bad public policy. But they must do it every day because that's what the law requires, and that's what the circumstance requires. Doesn't mean they like it. And so that stresses them every single day. And we ask people to get through these very difficult public processes—NEPA, Section 7 Consultations, 106 Consultations with the State Historic Preservation Officer, consultations with native American tribes, and try to find a balance between all of this.

And a person who wants to do an exceedingly good job takes it very personally. And they want to find that balance, and when they can't, they'll take the burden on that personally. And we have that happening all over Reclamation, and so you'll see people who leave when they're forty-eight years old to go do something different. (Storey: Yeah.) And they were the most respected person in the organization, and somebody goes, "Now what is that all about?" And you'll never hear the person look back and say, "I just couldn't do it again any more." You know, its just I had another opportunity, I want to go do something different." But it takes its toll and the younger you get to the top the longer you're under that kind of pressure. (Storey: Yeah.) And its the top of any part of the organization. Its just not the rarified air. You're an area manager, you're division chief or if you're running part of the organization. Its under a lot of pressure every day. And its on both the business services side as well as the technical side.

Storey: Speaking of things that might cause stress, I've been wondering what California's decision to

delay its bond issue might—what kind of effect that might be having on Reclamation?

California's Troubled Economy Affecting Cost Sharing Agreements

Glaser: Well, you go back to my comments earlier about our required cost share agreements, it's a very difficult *practical* matter for us right now. And just a simple example would be [that] we have what's called our Fish Screen Program, and so under C-V-P-I-A we were given authority and directed to go out and screen all these unscreened diversions along the Sacramento and San Joaquin rivers. Because fish would get sucked into these unscreened diversions and very high mortality. And some of them had *incredibly* high mortality rates. And so we've been going in all along the Sacramento and San Joaquin rivers screening with effective fish screens all of the major diversions, and we've about completed that program, by the way. Hundreds and hundreds of millions of dollars.

But most of them require a fifty percent cost share, and State Fish and Game has been the largest cost share partner in that. And without bond money they can't participate in that program, and locals can't come up with the fifty percent cost share to screen their facilities. So even though we have a really good bid climate right now, because contractors want jobs, the state doesn't have any money to partner with us so a lot of our screening activities that were in the queue are now being delayed, and we have a lot of programs that are that way. We have a cost share agreement with the state to, and we have to true that up from time to time. The theory being we have all these cost share obligations but rather than trying to compute each one of them separately and exchange checks, we have this agreement and we can get ahead of them or they can get ahead of us on our cost share obligations and we account for all of it. Then you have to true it up from time to time. And there's work orders to support all the work that's done under the cost share agreement, and we're getting a little bit out of balance right now on the cost share agreement. And so we're going to have to go in an figure that out. If they don't get a bond in two years, and they have bond authority, by the way, they still have a couple hundred million dollars bond authority, but the governor has suspended the sale of bonds under the bond authority that exists. Because of their financial situation. That's also very problematic. Also for the state one of the things that's very difficult right now is with their furloughs, and with their freezes. They're losing a lot of people. We're hiring people from the state all the time. And they're just leaving state government. There was a time we lost people to state government because they paid more, (Storey: Um-hmm) and a lot of people just wanted to work for the state. And now we have it going the other direction, and they have a freeze and so they can't even replace the people that are leaving. So, their capacity just to participate in things is dropping substantially.

Storey: Have we done anything regarding, what are we calling it now, the Isolated Facility?

The Isolated Facility

Glaser: Um-hmm. Yeah, there's a two hundred and fifty million dollar *planning* effort underway, not a two hundred and fifty million dollar *construction* effort, two hundred and fifty million dollar *planning* effort to get through determining the appropriateness and the appropriate facility to convey water through or around the [Sacramento-San Joaquin River] Delta as part of a long term solution to water supply reliability *and* creating a sustainable Delta. Because right now

what happens is we take water—both the state and federal projects have pumping facilities in the south Delta, and our combined pumping capacity is about fifteen thousand cubic feet per second. That's a lot of water—fifteen thousand cubic feet per second. And so when we start pumping in the south Delta, and we've made improvements such, in the Delta, that when we're pumping at very high rates the Old and Middle rivers which used to flow *north* they're tributaries, they're *channels* of the San Joaquin through the Delta, the Old and Middle rivers. And when we were pumping we actually reversed the flow in the Old and Middle rivers by as much as five to ten thousand cubic feet per second. So what used to run one direction now runs the other direction from up to five to ten thousand cubic feet per second which [is] a lot of volume. And what we do is we take the Sacramento River water and just generally shoot it across the Delta from, it comes in in the north Delta, and we shoot that water straight through the Delta to the south Delta and pump it. And that water actually will go right across the San Joaquin River and it'll go through the Old and Middle river channels, and it really disrupts the quality of water in the Delta, actually makes it more fresh, let's say lean, because you're bringing this fresh water to the south Delta. But it also disrupts up-migration and out-migration of species. If the smelt who are floaters, not swimmers, they're tidal fish so they float on the tide, and if they happen to get in that water that's going towards the pump, if they get in the Old and Middle river then they end up at the pumps either at our pump or in the Clifton Court Forebay for the state pumps. And at that point the mortality rate's going to be a hundred percent. And so the Isolated Facility is intending to take the water either *around* the Delta in a canal or, now, under the Delta in tunnels so that we don't have to *shoot* this water across the Delta and pick it up in the south Delta. And that'll make the Delta become more of a tidal marsh, and so we're spending two hundred and fifty million dollars to evaluate structurally how we do that, including doing preliminary designs *and* evaluating the environmental effects of doing that *and* at the same time we have this Bay-Delta Conservation Planning process going which would result in what's called the Habitat Conservation Plan under Section 10 of the Endangered Species Act that would address the needs of the listed species within the Delta. So all of that is going on as we speak. Fact at 11:00 today I have a two hour meeting that I have to phone in to because we just got the results back on the effect analysis on—which is a thirty three hundred page document—that evaluated the effects of these activities, both the habitat restoration as well as conveyance, on the listed species and their habitat. So we're going through that right now.

Storey: And when you say "We" is that "we" Reclamation, or is that "we" Reclamation *and* the state?

Glaser: Actually, it's a lot larger group than that. The B-D-C-P, the Bay-Delta Conservation Plan, that is what is called a stakeholder process. And it's sort of the like the Multi-Species Conservation Plan was on the lower Colorado [River](Storey: Colorado.) and they had that very large stakeholder group that participated in putting the plan together. Well, there's a very large stakeholder group that was put together and anyone can be party to the stakeholder group. You just have to sign the planning agreement that makes certain commitments. And the fundamental commitment is that you're committed to the dual objectives of sustainable Delta and a reliable water supply. If you can sign on to that agreement and you are the Bay Institute or the Heritage Foundation or Westlands Water District or Friant Water District or Contra Costa County, you sign the planning agreement [then] you're part of the process. You go to the meetings, you have a say, you work on the subcommittees, and so there is this stakeholder process. It's a stakeholder driven process so it's the "we" for the B-

D-C-P is *anyone* who's interested in finding a lasting solution who's signed a planning agreement.

Storey: OK, and who's providing the two hundred and fifty million.

Glaser: The water users *and* the Bureau of Reclamation and the Fish and Wildlife Service to a lesser degree.

Storey: And the intent of the Peripheral Canal, now known as the Isolated Facility is to provide water *both* for the State Water Project *and* for Reclamation's pumping plant?

Glaser: Theoretically. If they both wanted to participate in that. It is being evaluated to provide water for both of those. Now, its still anticipated that, even though you'll have a tunnel, two tunnels actually, and these are thirty-five foot tunnels. So you have two thirty-five foot tunnels, forty-some miles long. *Or* you'll have one fifteen thousand cfs canal around the Delta. With a right of way as long as several football fields wide. The theory is a portion of the water supply that goes south will come from those facilities. A portion of the water supply will still come out of the south Delta off the San Joaquin. And what gets pumped will get driven by what the biological needs and water quality is in the Delta. So you'll move water through one, or you'll move water through the other, or you'll move water through both depending on what the tidal conditions are, what the needs of the fish are, what the flow is in the San Joaquin, what the flow is in the Sacramento. You'll measure all those factors so there'll be these operating parameters, and we're putting together those operating parameters right now so they can be evaluated. And then it gets down to who builds it, who owns it, who pays for it, who controls the knobs, how are the decisions made, what's the decision making body. Its adaptive. You have to decide how to operate it based on physical conditions. What are the assurances. You know, what's the assurance to recover a species in the Delta. What's the assurance to reliability of water. And so we're working through all of these separate sets of issues. *Today* we happen to be evaluating the thirty three hundred page affects analysis.

Storey: When did this initiative begin?

Glaser: The planning agreement was signed by the first parties back in 2006.

Storey: Oh, so its been going on a while.

Glaser: And we really got geared up around 2008. So we've been working very seriously at this for probably two and a half years.

Storey: Good. Well, I know you have another appointment . . .

Glaser: And, by the way, we spent a hundred and forty million dollars, and the water users are trying to decide right now if they are going to put up another hundred million dollars. That's the decision they're making right now. And, of course, their boards will be making that decision. And its not a simple decision for them. It's a lot of money. And so they're trying to evaluate, right now, whether this process they're involved with is actually going to result in an H-C-P

and a facility that gives them some reliability.

Storey: H-C-P?

Glaser: Habitat Conservation Plan.

Storey: Let me ask if you're willing for the information on these tapes and the resulting transcripts to be used by researchers inside and outside Reclamation.

Glaser: Are you talking—is that just a blanket question? Are we going to get *when* it gets used?

Storey: We can talk about it . . .

Glaser: Certainly there a point that anything that I say can be made available. The only reason I hedge on the timing of is there's never been a more litigious time than today. (Storey: Um-hmm.) And if we were talking about academic researchers looking at this, this is one thing, but I'm deposed in all kinds of law suits, and so while I'm a governmental official, while I'm the regional director for the Bureau of Reclamation in Sacramento, I have to think about whether anything you asked me or anything I said could prejudice any law suit. I typically wouldn't say something to you that I wouldn't say in a public forum. And haven't, by the way, anything I've said to you I've said in most forums—whether its to our employees in open forums or public speeches. So, yeah, I can't think of anything that I said that under declaration, under a deposition I wouldn't answer exactly the same way. . . . Yes, I wouldn't see any reason that this could not be made available.

Storey: OK, good. I appreciate it. Thank you.

END OF SIDE 2, TAPE 2. SEPTEMBER 3, 2010.

BEGINNING OF SIDE 1, TAPE 1. DECEMBER 16, 2011.

Storey: This is Brit Allan Storey, senior historian of the Bureau of Reclamation interviewing Donald Glaser, the regional director of the Mid-Pacific Region of the Bureau of Reclamation, [on December 16, 2011,] at about 10 o'clock in the morning in Building 67 on the Denver Federal Center. This is tape 1.

Well, last time I think we had talked a little about the San Joaquin River Recovery Program. Why don't we see if there are any new developments? Its been like a year and three quarters, a year and a half, something like that.

San Joaquin River Restoration

Glaser: Sure. Well, really never sure what we talked about the last time. And what we've talked about over time. Maybe I'll just start with where I see the San Joaquin River Restoration

Program⁶⁰ today, and how I see that fitting into the future of Reclamation. One of the things I've learned since I've come back to Reclamation in the Mid-Pacific Region is that much of what we're seeing play out in that Region is a picture of the future of where many issues are going in Reclamation, and that is, you know, you have a program that was authorized and hundred and ten years ago this coming year, and it was based on a set of values and public interests a hundred and ten years ago. And the world has changed, and particularly the western United States has changed significantly, and its becoming urbanized and water that was abundant for agriculture has competition for other purposes in the twenty-first century. And no where is that more apparent than California with its scores of millions of people that it has out there and the huge urban centers and the demand for water and as a progressive state, with progressive elements within the state, there is a very strong interest or emphasis on the ecology or the sustainability of ecological systems within the state. And most recently we've seen that with the legislation that the state legislature passed regarding the Delta—the Sacramento and San Joaquin Delta. And within that legislation is a public policy that incorporates two public interests, a sustainable Delta, an ecologically sustainable Delta, and recognizing its significant as a water hub, a reliable water supply for agricultural and municipal and industrial uses. This is now called the dual objectives or dual goals. And its become part of California's water policy. And I think we're seeing that play out elsewhere across Reclamation.

We're seeing that play out elsewhere in Reclamation as areas urbanize. Denver is a really good example. When the Platte River was developed and when we built the Southeastern Project in the, or the Fryngpan-Arkansas, if you want to call it that, and we built the Colorado-Big Thompson, it was an era of agriculture, and they were developed for agricultural purposes. And we watched this area urbanize, and we see that water transitioning from agricultural purposes to solve the water short situations on the Front Range, but it cannot be done to the detriment of the endangered species on the Platte River.

And so, what we're experiencing in California is starting to play out elsewhere across Reclamation. And it is these competing public objectives—I don't know if they're competing—of these public objectives that need to find a balance and a sustainability for future generations, and one of those is the San Joaquin Restoration Program. And in a Region that has very, very difficult issues, the Mid-Pacific Region, by far the hardest program for me to implement right now as the regional director is the San Joaquin River Restoration Program. And its odd, because on its surface you would think that it would have incredible appeal, or incredible allure and there'd be a lot of support for it, and you would just have to figure out the technical aspects of it. And we would be able to move forward and implement it. But really the most difficult aspects of it is to sort out the sociology of it because you have individuals along the San Joaquin River that like it just exactly the way it is. And then you have just as strong of interests that want to see—and the way it is is a fully regulated river that certain segments of it have not had flow for sixty years. And people like it that way. They've learned to live with that river. It's a full generation behind them. And many of their fathers

⁶⁰ "The San Joaquin River Restoration Program (SJRRP) is a comprehensive long-term effort to restore water flows to the San Joaquin River from Friant Dam to its confluence with the Merced River, restoring a self-sustaining Chinook salmon fishery in the river while reducing or avoiding adverse water supply impacts from restoration flows." See U.S. Fish & Wildlife Service, Sacramento Fish & Wildlife Office, "San Joaquin River Restoration Program," www.fws.gov/sacramento/fisheries/San-Joaquin/fisheries_san-joaquin.htm, (Accessed June 2014).

and grandfathers have fought for decades to make the improvements that they see to the river to allow it to have much more agricultural production. And because of it, it is an incredibly productive agricultural area—unprecedented in the world. But there are other just as strong areas of influence that said that should not have come at the expense of the river and these majestic fish species that used to thrive within that river system. That being salmon and steelhead.

And so we had twenty years of litigation over renewal of a contract for Reclamation that ended with a stipulated settlement. The parties finally agreed N-R-D-C, the Natural Resources Defense Council, representing a *broad* area of environmental and fisheries interests, the Friant Water Users Association, representing scores of Friant districts, and the federal government. We came to an agreement on how to balance these different public interests. An interest for a viable river with a self-sustaining population of salmon and steelhead, and continued agricultural production in an area that's dependent on the same water that's needed for fish. Well the parties found a way to reach a settlement because they were all at risk in the litigation, and they all saw something positive from agreeing to a compromise of their principal issues to meet a broader public interest and an assuredness of their interest in the future. The problem was the settling parties don't live along the river that's getting recovered. The Friant Unit districts, they are upstream from the recovered portion of the river, and so when the river gets recovered, there are third party interests that get the river. And they weren't part of the deal. And they pretty much don't benefit from the deal, from their perspective, yet they get the detrimental effects of the river on their agricultural production. And it's created an incredibly difficult sociological and political situation. And it is playing out today. And whether or not we will ultimately be successful in implementing the restoration program and putting water into a river on a sustainable basis, that hadn't had water for sixty years, and bringing back the spring run and the fall run Chinook salmon and addressing the issues associated with steelhead, I'm not certain. I couldn't predict today whether we will succeed in meeting the objectives of the settlement and the act, or not. But I will tell you this, it is the most challenging thing I've ever worked on. Because people feel very strongly. They have made life choices.

For instance, there is a farmer that lives along the river and he's one of the really old farm families. He comes from one of the really old farm families within the river and he's being affected by the restoration flows. What happens is water's now in a river channel that hasn't had water for, on a sustained basis, for sixty years, and so for the last sixty years they've been able to encroach on the historic channel with their farming operations because they did not have the sustained flow in the river that raises groundwater. Because when you put water down that river it's a, immediately the groundwater starts to rise adjacent to the river because the lands that they're farming are actually below the bottom of the river prism. And so historically that would have been land that might not have been suitable for agriculture. They didn't have irrigation drain tile in there, and so it might not have been suitable for agriculture until Friant was built sixty years ago, and the gates closed, and the river was first reduced and then ultimately moved out of its channel and put into a bypass system. Well, now that the river is flowing on a sustained basis, his land is starting to be seeped. And he raises a very high value cash crop there, and he was not party to the settlement, but he gets the effects of it, and he's not happy with that, understandably. And I met with him, and what he said, "Don," he said, "Don, one of the things that's really hard for

me is my father spent his whole life getting the East Side Bypass built and moving the river from the river channel to the East Side Bypass." And he say, "Its really hard for me today to cooperate on bringing the river back into the channel." He says, "I'm trying to do that, but its hard for me because it looks like that I'm—the East Side Bypass is my father's legacy—and it looks like I'm giving up on the legacy of my father's life's work." And that is the sociological aspect of these programs that we don't realize when we're cutting deals and getting things authorized—that in the end all of these decisions come down to human lives.

Decisions More Difficult When Looking at Individual Implications

And as policy makers our jobs are a lot easier if we think of things as a matter of policy or at the global level, at the taxpayer level. But when you start looking at it as to the individual implications on individual lives, it can take your breath away. It does me. You know, there are days that it is really hard for me to carry out my *public* responsibility because I know it hurts somebody in their personal life. And there are those social tradeoffs all the time. And I get it, but its hard when you're the one that's responsible for the program that's forcing those personal tradeoffs to impact somebody in their personal life. So, can we work out way through these things that are called third party impacts from the restoration program? I don't know. I've had—this week I could not tell you that. I can tell you, though, this week I've already spent at least eight hours at the very highest policy levels trying to sort our way through that particular issue. And its an issue that we face every week as we try to carry out the program. And we're going to see it every place that we go in to try to replicate natural systems.

And I'm a westerner, you know, and so I love the West, and I love a stream, a free-flowing stream that produces clear cold water that hold particularly native fish and support wildlife. You know, I get all that. I'm from the West. And I can understand the values of people who push for that, but see, I'm also a student of Reclamation history, and I've worked for Reclamation a long time, and started with Reclamation in the mid-'70s, and I love the Reclamation program and everything that it stands for. You know, the history of the West is inseparable from the history of Reclamation, and we defined much of the West through the projects that we built. And so, it tears at me as a policy maker as I try to embrace both sets of values.

What the state of California is now embodied in law, these co-equal goals of a sustainable Delta and a reliable water supply, and as policy makers at any level as we try to go in, like on the San Joaquin, and balance a recovered river with sustainable fish populations with the agricultural practices of the last fifty or a hundred years, and how that influence the lives of commercial and recreational fishing people, on the one hand, or the lives of individual farm operators on the other, finding our way through that creates—I find myself personally captured by both public interests. I'm pretty compassionate guy, and so when I see the plights of these individuals and hear the passion in their voice for their particular interest, and they aren't close to each other on a continuum, that I understand the value and the interests of both, and as being the decision maker between those values and interests, that has a great deal of influence on how that affects their life. It become kind of a personal burden. I don't mean this to sound more dramatic than it is, but it becomes a very personal issue for policy makers today. And I think it is, for the emerging policy makers at the state level, whether its

natural resources departments, or state engineers, or local legislators who represent areas of interest in state government in the West, or whether its with the Fish and Wildlife Service or the Bureau of Reclamation or, in our case, National Marine Fisheries Service, where we are pulled into these debates about public and social values at a local level. I think its going to take a different kind of manager, and it will put different pressures on the those managers' lives—at whatever level of government they're at. Because they're going to experience the tension that is occurring now over the sociology where you have economy and property interest, and property interest is a constitutional issue. It goes back to our founding fathers principle of the sanctity of personal property. So you have that on the one hand and you have public trust on the other. And what is the public interest in the use of your private property and where that intersects in the future its going to take a different type of manager. And the job will be more demanding at the emotional level. And its been really interesting. Its been really interesting for me to experience it the end of my career because I started in a different time. (Storey: Um-hmm.) And its been interesting to see that evolve. And you could see it, you know, and as I look at California, I can see its applicability to other growing areas whether its Boise or Billings or Denver or Tucson or Phoenix or what the call the Front Range in Utah, everyone knows that's not the Front Range, *this* is the Front Range.

Storey: Over there, you mean. The Wasatch Front.

The Further Removed from the Farm, the Conflicts become More Pronounced

Glaser: That's it, the Wasatch Front, you know. Well, we'll let them have their illusions. But, you know, as these areas grow and people get further removed from the farm and they have more leisure to enjoy the beauty of the West, then I think the conflict becomes more pronounced. You know an interesting thing, and I think its one of the issues that we deal with, I'm probably making this up, but that's OK, I think it's *generally* true. I read somewhere that my generation, *our* generation, was a transitional generation, and that our children are the first generation that is more than two generations removed from the farm. That as *we* look back, I think it was something like ninety percent of all Americans were less than one generation removed from some rural background. (Storey: Um-hmm.) And so that that means that going back to the time of the Reclamation Act, which was that generation, they were directly tied to the family farm. And between that generation we transitioned, but out kids have really no idea of the value or the contribution, or no emotional attachment to the concept of the family farm. And this happened across the country, and so I think the, and my kids, I will tell you, they have *no* interest in agriculture, but they really care about free flowing streams and good fisheries and high country walking and skiing. That's their interest. (Storey: Um-hmm.) And as those interests become more representative of the population's interest, then its going to be a challenge for Reclamation to perform its fundamental functions of providing water and power. And we're losing a little of that identity today.

You can just kind of see it in the organization. It ebbs and flows. I think our core mission values and what we are as an organization today is a little better defined than it was in the '90s. In the '90s we were in that transition, and I think we kind of lost our identity and lost our sense of purpose. I think we're emerging from that today, and its becoming much more defined what our role in the future is. But I think it is the San Joaquin River Restoration programs, the Klamath dam removals, the Platte River Restoration, the Lower Colorado

Multi-Species Conservation Program.⁶¹ It is about the conversion of agricultural water to M&I. So we're in this transition as an agency from what was a very narrowly defined purpose to now something that is a very broadly defined multi-faceted public purpose. And we're going to find that to be much more challenging—maybe for a lot of people, for younger generations, something that they can identify more with. But I will tell you, it will be a program that's much more difficult to manage. Because it will have so many more dimensions to it. (Storey: Um-hmm.) So what do you do with that?

Storey: Well, I asked you where the change is most evident in Reclamation, but I'm not sure how to phrase it. (Glaser: Well, just chuck it out there mostly . . .) Well, I've already expressed part of it. Is there a particular turning point you think within Reclamation policy staff where you can begin to see this really taking hold? This evolution?

Evolution Taking Hold

Glaser: Yeah, I think so. Whether this is true or not, I'm mostly just making this up based on my personal observations over time. But I think Reclamation, the Reclamation program began to change in the late '60s and early '70s. And there were quite a few things that influenced that.

And I'll just throw them out for what they're worth. The first was there was a—the nation was changing a little bit. The '60s were an era that where you saw a significant challenge to the institutions of the United States—whether it was governmental institutions and the protest of the Vietnam War; whether it was about the test of historic views and values relative to civil rights; *or* whether it was about this emerging environmental awareness. Whether it was for clean water or endangered species, if you remember, those were all products of the '60s, and they all became laws within the '60s or early '70s. But they all came out of this, to me, what was the beginning of our generation's unrest with the institution. And it just manifested itself different ways. And I guess I would attribute part of it to the advent of

⁶¹ "In 1997, Colorado, Wyoming, Nebraska and the Department of Interior formed a unique partnership with the goal of developing a shared approach for managing the Platte River. Water users from the three states and local and national conservation groups joined the effort. Together, these stakeholders developed an innovative approach for improving the management of the Platte—for the health of the ecosystem and the people that depend on it." See "Platte River Recovery Implementation Program," www.platteriverprogram.org; see also "The Lower Colorado River Multi-Species Conservation Program (LCR MSCP) was created to balance the use of the Colorado River water resources with the conservation of native species and their habitats. The program works toward the recovery of species currently listed under the Endangered Species Act (ESA). It also reduces the likelihood of additional species listings. Implemented over a 50-year period, the program accommodates current water diversions and power production, and will optimize opportunities for future water and power development by providing ESA compliance through the implementation of a Habitat Conservation Plan (HCP).

"The program area extends over 400 miles of the lower Colorado River from Lake Mead to the southernmost border with Mexico, and includes lakes Mead, Mohave, and Havasu, as well as the historic 100-year floodplain along the main stem of the lower Colorado River. The HCP calls for the creation of over 8,100 acres of habitat for fish and wildlife species and the production of over 1.2 million native fish to augment existing populations. The plan will benefit at least 26 species, most of which are state or federally listed endangered, threatened, or sensitive species.

"The Bureau of Reclamation is the implementing agency for the LCR MSCP. Partnership involvement occurs primarily through the LCR MSCP Steering Committee, currently representing 57 entities, including state and Federal agencies, water and power users, municipalities, Native American tribes, conservation organizations, and other interested parties, which provides input and oversight functions in support of LCR MSCP implementation. Program costs are evenly divided between the Federal government and non-federal partners." See "Lower Colorado River Multi-Species Conservation Program: Balancing Resource Use and Conservation," www.lcrmscp.gov, (Accessed June 2014).

the television and—because the world became very small. And it became very graphic. If you'll think back to the '50s and '60s, and I can remember that, I hate to admit, but you would see people being attacked by dogs and shot by fire hoses in the South over issues of civil right. I mean, it was on T-V. We would see it on the evening news. I don't know if you can remember that, but I can remember that. Seeing dogs sicced on people. And people being hosed down by fire hoses because they were trying to peacefully demonstrate for their personal rights. And we saw it on T-V. It wasn't about reading it in black and white, and it was very impactful. I don't know if you remember when, I think it was the Ohio River that caught fire. (Storey: The Cuyahoga, yeah.) Yeah, and people started talking about swimable and fishable waters that became embodied in the principles of the Clean Water Act. And at that time the bald eagle was about to go extinct. The bald eagle, which was the symbol of this nation, and it was very graphic. I mean, it was something that captured and the plight of the wolf and the plight of these mega-species, like the bald eagle, led to the Endangered Species Act. And this unrest and suspicion of government led to NEPA, the National Environmental Policy Act, that said we had to make decisions in the public light.

And so I think it was that period of unrest that started to manifest itself in the laws, and it wasn't the laws itself that started to change us. I think it was the period of unrest, and people's challenges of things that we were doing. Because before that time there wasn't much challenge to the Reclamation program. There was this triune of local government, national government, and the agency that thought this was a good idea, and it was enacted and we carried it out. And we did it in a fair manner. Rights, respect for private property, but condemnation of private property was very common before the '70s with Reclamation. We would take the property through right of eminent domain, and then we would compensate them fairly, often through an arbitration, a hearing of their values in that property, but it had nothing to do with our right to take it. We took the property for the public good. Since the '70s we don't do that much any more because it is one of those things that the value changed through that period of time. And out of that I think when Jimmy Carter was elected as president, he came in, that was in the mid-'70s, so he's coming in right after all this unrest that resulted in the Civil Rights Act, Clean Water Act, the Endangered Species Act, Migratory Bird Act, the National Park Policy Act, he's coming in on that wave, and he *embodied* some of those values. And for us at the time there was Carter's "hit list" where he wanted to look at fourteen federal projects, civil works projects, to see whether they were economically justified and whether the environmental impacts associated with them did not offset the other public interests. And there were seven Reclamation projects on that list, and it brought a different attention to the Reclamation program. And then I think one of the things that *fundamentally* changed us as an agency is the oil embargo of the late '70s. I don't remember if you remember when ~~OECAP~~ [OPEC] said they weren't going to export oil to the United States.

Storey: I remember when it went up from twenty-seven cents a gallon.

Glaser: Yeah. It went over a dollar and we said, "This is unconscionable and we actually had a rationing of gas in Montana where I lived it was every other day, odd and even license plates could get gas. And many places there was a limit to eight gallons on the gas that you could get. And there was no Department of Energy at that time. It did not exist, and there wasn't a national energy policy. But in the face of that *crisis* the Congress enacted the National

Energy Policy Act and set up the Department of Energy. And as part of that, they consolidated energy functions within this one new department. And one of those consolidations was Reclamation's power marketing function. It went to the Department of Energy and they set up a new entity, Western Area Power Administration that did not exist before the late '70s to serve as the power marketing agent for Reclamation power. And when you separated water and power . . .

END OF SIDE 1, TAPE 1. DECEMBER 16, 2011.

BEGINNING OF SIDE 2, TAPE 1. DECEMBER 16, 2011.

"We Lost the Basic Underpinnings of What Had Been Our Historical Mission"

Glaser: When we lost our construction projects such as Garrison in North Dakota and Oahe in South Dakota, Narrows and O'Neills in Colorado and Nebraska, we lost the basic underpinning of what had been our historical mission: construction of civil works, generation of water, and power and marketing of the power function. And so I think it was a combination of the social change that was occurring and then these discrete actions that were taken by government that changed the Reclamation program. I actually think when Reagan came in as president, Ronald Reagan was elected president, he came in on a very fiscal conservative platform, and one of the things that *he* looked at were our business decisions as a matter of economics. And so the economics of our Reclamation projects became even more scrutinized. And cost-sharing became a fundamental aspect of the Reclamation program.

And so over a fifteen year span, just the fifteen years of my initiation *with* Reclamation, I saw us change from the historic Reclamation program, with a *lot* of on-going construction, and a huge power program, to an organization that had very *limited* construction, cost share arrangements, evaluation of the economics, national environmental policy requirements for an environmental assessment which generally led to environmental impact statements, the Endangered Species Act, and our obligation under 7-2-A of the Endangered Species Act, as an Interior agency to avoid adverse impacts to not jeopardize species that were listed as threatened and endangered, or adversely modifying their critical habitat. You put all that stuff together, and it changed the agency fundamentally. Then we went through a ten year period of saying, "Well, if we aren't that, then what are we?" And we struggled with how we covered the cost of the agency because we lost our big power program, we lost our construction program, which absorbed a lot of the costs. More costs went to our water users. They objected to these additional costs being placed on them. And through those couple of decades we had to wrestle with all of these issues. Not only were there more costs coming through requirements of the Clean Water Act and the Endangered Species Act, they have cost us some water and operational flexibility. In addition to that, we had lost our ability to spread costs over a broader sector, and more fell on a narrow sector. And so there was more cost to spread on fewer entities and so our costs went up, we came under criticism, and we struggled through all of those changes. And it consumed much of our energy as an organization just sorting all of that out.

Now I think we've come out of that. We've kind of come out of that, and we've sorted out much of our financial underpinnings. We've managed to get our costs commensurate with our program. We've defined who pays those costs. We're finding a way to deal with Clean

Water Act and endangered species *issues* in a regulatory framework and still maintain our basic function of providing water and power. But then what you get is you get these—now we end up with responsibilities for recovery and restoration of things that we, in part, contributed to the impact of not always wholly—most often not wholly. But we are the government agency that ends up with the responsibility for things like the Platte River, the lower Colorado, the San Joaquin, the Trinity, now the Klamath [rivers], and you just kind of go around. (Storey: The Delta.) Yeah, the Delta. We've come out of this a different agency. Now, I've found myself in the last, since I've come back, sneaking up on four years now, I was gone for twelve years, so . . . I went and did other stuff. I was actually gone from Reclamation fourteen years because I went to B-L-M for a couple of years.

"Its Important for Us to Remember Where We Came From"

But when I come back I find myself compelled anytime that I get five people together to talk about the history of Reclamation; how we got to where we're at. Because if we lose a sense of our . . . and in that way we're no different than my kids who've lost their identity from where they've come from. If an organization, we sort of *lose* our identity, you know, we forget, that's why what you're doing is important, by the way, I didn't get it when you first came to me and said, "Don, I got the really good idea when I was in D.C." I thought, oh, wow, all the stuff we have to work on, because we were right in the middle of all that junk I was talking about, "Oh wow!" I guess so, but I really didn't get it at the time, but I kind of get it today after being gone and coming back. And I find myself reading a lot more about the development of the West and where Reclamation fits within that, and I think its important for us to remember where we came from. We have a proud heritage. You know, there's not one day that I feel anything but pride and humility for being able to work for Reclamation in some important capacity. Now, that doesn't mean that I don't understand that in a 2012 lens that something we did in 1912 doesn't need revisiting. You know, I get that. (Storey: Um-hmm.) But I do believe this, the test of our greatest as an organization and as a society will be *not* that we make these decisions about what the future looks like, but it will be in the manner in which we implement those decisions. That gets us back to the San Joaquin. I cannot argue that it is in the long term public interest to reestablish that river or maybe even to spend what are very, very, large amounts of dollars to reestablish a spring run and a fall run of the Chinook salmon—southernmost populations. Going to be *hard* to get reestablished, and to have to sort our way through all of the issues associated with doing that. I can't argue that that's not a good public decision.

Storey: You cannot argue that its not or that it is?

Glaser: Either. The point I'm trying to make is this. I have no argument with the decision itself. That was a decision made by the courts and Congress, and, to me, I understand why there is this strong interest and value to reestablish these natural systems and to be protective of species. I get that. And so I think that's just going to be part of our future. The test of our greatness, or our effectiveness, is going to be how we do that in the face of the impacts it has on individual and community lives: on jobs and schools and peoples livelihoods and what they've committed their lives to. Because, what we're doing is we're taking a hundred years of commitment to the development of sort of this Jeffersonian, rural, agricultural economy and base, and we're laying a new set of values over the top of it. And the test will be whether we

can bring these new values—if we can satisfy these emerging values and not do it at the expense of what is sort of the backbone of America's society.

That'll be the test, and the hard thing is if you remember the evolution of the movement away from the farm—ninety percent of the people were one generation *away* from the farm to today its ten percent. You're going to have to do it in the face of the popular vote. Because the popular vote won't care that much about agricultural. Although in certain areas, if they run surveys, they ran surveys in Colorado that says the majority of the people who live in Denver care about open space (Storey: Um-hmm.) and care about sustaining agriculture. But I think as we get further away from that, if you were to take that same survey in the L-A metropolitan area, I don't think you'd get the same results. Because sociologically they're just that much further removed. Denver's a generation away from being a western town. When I first moved to Denver, we prided ourselves in our western heritage, and I think we're only one generation away from Denver being a cosmopolitan town. So what happens to rural America when these other values start to take over in the popular vote, and I think that will be interesting to watch. And that's what we see in California. That's what makes California so interesting, because there are many people in California that I do business with that not only don't care about agriculture. They actually think agriculture *is* the problem.

Storey: Yeah. Well, we went from being a net exporter of food to being a net importer a few years ago here.

Glaser: Although California, I don't know where it ranked, but agricultural exports in California are still astronomically high (Storey: Yeah.) as a relative issue. They raise crops that are very attractive in the world market. Money crops. Short grain rice for sushi, huge export of short grain rice for sushi. Almonds—I think I saw California produces close to ninety percent of all the almonds in the world. (Storey: Yeah.) Almonds are very popular . . .

Storey: Most of it there in the Central Valley . . .

Glaser: Most of it there in the Central Valley, that's right. Literally all of it in the Central Valley. And so, cotton. Who would have ever thought that cotton would have come back in as a *huge* export crop, now—an incredibly valued market for cotton this year is incredibly high. And its an international market, so . . .

Storey: Where in this evolution of Reclamation do you see Dan Beard?

Commissioner Dan Beard

Glaser: Yeah. I don't usually like to talk about individuals very much. I find my view of an individual's not. I don't think its very interesting. Probably not very accurate. (Storey: Oh, OK.) But I would say this. I was Dan's deputy [commissioner], when he came in I was the deputy in Washington, and I think Dan chose, made a cognizant decision, to retain me as his deputy, because I probably was viewed as a progressive in Reclamation given the time. (Storey: Yeah, I would think so.) I don't see myself as being very progressive because I see myself as being more mainstream, but I probably didn't look that to Reclamation *in the moment*. And so Dan chose to keep me as his deputy so Dan and I did a lot of work

together. I think the characterization of Dan Beard's not accurate. You know, the agricultural view of Dan Beard, I don't think its an accurate view of Dan Beard. I don't think he was anti-agricultural, although many people would think that would be true. I don't think he was anti-Reclamation. Although I worked with him every day, I don't think that was true. *I do think* it was true that Dan believed that Reclamation needed to change to be relevant in the future. And that he came to Reclamation to help bring about that evolution. And, as a person who's been *stuck* in my career changing things, I was really pretty good at changing stuff, and so when they wanted the Denver Office changed, they sent me out here to sort of dismantle the Chief Engineers Office or the ACER's [assistant commissioner for engineering and research] organization, and build the Technical Service Center. I didn't volunteer to do that. I didn't particularly want to do it. I don't even know if I thought it was a particularly good idea. But I was really good at it, and it wasn't because I was heartless. It was probably because I cared a lot about the institution so I was going to make sure, if it had to be done, it was going to be done well. But if you took a poll in the early 1990s in *this* office when we were going through that, that would not have been the popular view of what I was doing. And folks would have probably thought somehow that I thought it was the right idea, and that I enjoyed doing it. Neither of which was true. And . . . but I was affecting people's personal lives, and I was dismantling and institutional icon. The Chief Engineer's Office had existed in Reclamation for seventy-five years. And the Engineering and Research Center was world renowned, and my job was to dismantle all that. And I get that, gees, who wouldn't. But my job—it was what I was asked to do. Now, I could have said, "No, I'm not going to do that," but the option at that time was they were going to shut Denver down, and I thought that was fundamentally wrong.

So what's this have to do with Dan Beard? I think, just like what I was tasked to do, and the issues that I took on as individually and they were attributed to me in a certain manner, I think much of what Dan was trying to do was attributed to him sort of in an unfair manner. And, so, would this . . . did he have a lasted effect on Reclamation? That might be a fair question. I would say today that answer to that is yes, but its not what people would think it is. Because all they saw was this persona, but what Dan did that was lasting is he set up this idea of area managers and empowering the manager in the field. That was Dan Beard. (Storey: Um-hmm.) And whether you're in Denver and you think that was the wrong decision, or whether you're the area manager on the North Platte and you think that was the best decision Reclamation ever made, it was a cognizant, deliberate decision by Dan for a specific outcome—for a specific reason. And its his most lasting legacy. I absolutely believe that. And so make of that what you want. Now I would argue that somebody who would empower the field manager actually was embracing the Reclamation program. Because if he wanted to kill Reclamation he would have de-empowered the field and centralized that authority. That would have been the death knell for Reclamation, but by doing the opposite what he really did is perpetuated the strength of Reclamation which has always been at the project level.

Storey: Hmm. Did it raise any issues?

Glaser: Oh, yeah.

Storey: What kinds of things?

Re-organizational Issues

Glaser: Yeah. Within Reclamation you have two schools of thought. You always have had. You have the corporate perspective which believes in, historically would have been command and control. That would have been the historic model—command and control. Authority comes from the top and is exercised at the top, and the program is directed from the top and carried out at the field. Or you have the people who believe in the decentralized empowerment model, and that exists today within Reclamation. If you go to the leadership you'll find two distinct philosophies. The corporate philosophy or the delegated, empowered approach. And so, at the time Dan was going through this, you had that struggle because he was taking things that historically had been centralized and decentralizing them. He was making area managers. There were no area managers, they were project managers and project superintendents before that. But the area manager concept said their new authority and empowerment had to come from someplace. And I don't know if you remember Dan did something that was very risky. I counseled against it. I counseled against much of what he did. But you have to remember I might have looked radical, but I was conventional. I may look progressive, but I'm quite conservative. I'm a conservative person today in my life and in the conduct of my job. He loaded all of our Reclamation Instructions up on a dolly and wheeled them down to the dock to be disposed of because he abolished all Reclamation Instructions. (Storey: Um-hmm.) And I don't remember if anyone remembers that, but we used to have our Reclamation instructions, and they were voluminous. And they dealt with every aspect of Reclamation. And it prescribed, as a regional director and as a field manager how you did certain things: from how you organized your boxes that you called your organizational structure; what those codes looked like; what they were called; how things were graded; I mean it was a very much all the way through O&M charges; what we do with reviews; it didn't matter; and he just loaded it all up and said we're going to empower the field, and we abolish this. Well, if you're the centralized institution this was your job, your life's work. You were the keeper of the policy. You were the person that was most highly regarded for what you knew as a matter of policy in a given area. Do you remember those times?

Storey: Oh, yeah.

Glaser: Yeah, and see he did away with that. He turned the organization upside down, and of course, there was all kinds of concerns at the time. And that affected me personally because I was his deputy, yeah I feel painted by his brush. What people didn't see is when the door was shut, "You can't do that. You know, we're just going to have chaos. What we're going to have is anarchy." You know, because without a framework, what you're going to have is everybody deciding their own thing. He said, "Yeah. That's what I want."

And I don't know if you remember something else that he did. He had his forgiveness coupons. (Storey: Yep.) And he passed them out, and everybody got *two* a year. And he had this theory that he espoused in his talks: its better to ask for forgiveness than to ask for permission. That tied directly to the abolishment of the standards. (Storey: Um-hmm.) And so he was a guy, now, me, I abs . . . , as a conservative person I absolutely believe in evolution—not Darwinian evolution, but by making change, change evolves. And I like to keep the basic form and structure we have as we evolve in some area. Because there was

value to what we did. Now, see, Dan believed in *revolution*. See, I like stability. He liked chaos. And actually that probably made us pretty effective because I counterbalanced much of his inclination to just create this chaotic environment and then shape a new world out of it. There was a little bit of approach to that in Dan. But it was very calculated. He thought his way through what he was trying to achieve. It wasn't random acts of revolution. He had certain things he was trying to achieve, and it wasn't for me to decide whether those were right or wrong. Because I wasn't appointed by the president to provide guidance to Reclamation. I was hired by Dan Beard to carry out the policies of the administration, and, you know, I left Reclamation in '94.

Worked on Interesting "Stuff"

And maybe . . . I was just a little tired. I didn't want to work for the government anyway, by the way. I never wanted to have a government career. That's why I left government in '96. Never intended to have a government career. They just kept giving me really cool stuff to work on. Really interesting stuff. Way beyond my means. Way beyond my capability. But it was a time where there was incredible opportunity in Reclamation to have an influence. Its actually why I came back because that same thing exists in California today. Incredible opportunity to have an influence. I tired. I became tired in the mid-'90s. It was just an emotionally draining fifteen years, twenty years. Guess it was about twenty years. And one day I just woke up, and I was tired so I went over to B-L-M as the state director. Thought this would reinvigorate me, but it was still government, so after a couple of years—it was a great experience, by the way. But after a couple of years over there, I was greatly successful. I was very popular at Interior and with the constituent communities of B-L-M and with the employees. But it was government, and I think I was just tired of government at the time. (Storey: Um-hmm.) And I needed to do something different so I just left.

And I don't know how much of that came out of just the real diff . . . it was hard for me because I was involved with the setting up of Western Area Power Administration, because my boss, Bob McPhail was the regional director in Billings. He went to be the first administrator so it was his administrative staff in Billings, we set up all of WAPA. And then he took many of us with him when he went to Western. So I was involved in that, then I was responsible for closing down the (brief interruption) Lower Missouri Region and consolidating it with Upper Missouri to become Missouri Basin (Storey: Missouri Basin Region first.) and then a few years later I was responsible for closing down the Amarillo Office and we became Great Plains [Region]. And then I went into D-C after they'd moved everybody to Denver, and I was responsible for sort of managing the remnant of D-C at that time and turning it into a fully functioning office. And much of we did—much of what *I* did at that time is still there today. The regional liaisons which were seen as something *really* successful, you know, that was something I did out of desperation just to try to survive from one day to the next. Never thought they'd last twenty years. Twenty years later they're part of how we do business. (Storey: Yeah.) And then I came to Denver to deal with the ACER and that got to be a point of time where I was just tired of doing that. They asked me to do it because I was pretty good at it, but I was tired of doing it because its emotionally exhausting and so I just went to do something different.

So, Dan Beard, lasting legacy is the empowered field that we have today and the fact

that Denver is a support organization. It wasn't like that before he came. He turned that over. Good or bad? I don't know depends on your—if you took a poll across Reclamation it'd probably be two-thirds [to] one-third good but that's just because there's more people in the field. He was an interesting guy. And what he wanted to do. I talked to him a lot because I sat in the office next to him. What he wanted to do was driven by sound public policy and what he saw in the future. How he was viewed as a change agent—he will always be viewed as—some people might attribute Reclamation's troubles to him, but as we talked earlier, I think they started in the '60s with you and me. When we had long hair and we're going to school and questioning the authority of the country.

Storey: Do we . . . to change topics, do we have time to talk about the water supply in the Region this year?

Region's Water Supply

Glaser: Yeah. Yeah. Just quickly, and then I have to go to my next meeting. (Storey: Yeah.) Yeah, the Central Valley Project, the magnitude of it is still really hard for me to get my arms around. And in the field I spent my time in the Great Plains. Upper Missouri, Missouri Basin, Great Plains. Worked in three regions. Never changed my office, which was kind of nice. But when I get to the Central Valley Project, just the magnitude of it as a matter of agricultural economy, the incredible value of the crops, and all you have to do is drive from Redding to Bakersfield on I-5 or [U.S.] 99, and if you're not impressed by that you're an urbanite, because what you see is just the most *incredible* agricultural machine that exists in the world, I'm sure. Its just incredible. And its all dependent upon . . . eighty-five percent of it is dependent on C-V-P water supply—maybe eighty percent of it. You have a few private districts; then in the very south end of the valley you have the State Water Project down by Bakersfield. (Storey: Um-hmm.) But predominantly its just Central Valley Project. And the thing about the Central Valley Project and when you drive through it, what you don't realize is that there are all kinds of different contractual rights within the C-V-P. The C-V-P has four hundred contracts; two hundred and sixty major water supply contracts; then we have a hundred and fifty-odd contracts. And we've contracted for nine point two million acre feet of water—so that's three-quarters of the flow of the total Colorado River, every year. That's how much water we have contracted. And our historic delivery was somewhere around seven million acre feet. And the valley developed. These decisions on investments were developed based on these water supplies being reliable. Because up to 1990 they were, in every year except severe drought years. But because there are different types of contracts, throughout the valley, some of them are senior water right based contracts. Some of them are just water supply, water service contracts, you have the Friant Division which is different than the west side. You have the exchange contractors who are in the central San Joaquin. . .

END OF SIDE 2, TAPE 1. DECEMBER 16, 2011.

BEGINNING OF SIDE 1, TAPE 2. DECEMBER 16, 2011.

Storey: This is tape two of an interview by Brit Storey with Don Glaser on December 16th, 2011.

Original water rights . . .

Glaser: Yeah. The exchange contractors were and they're between Friant and the San Luis Unit, and all of these are delivered water by Reclamation under contracts. But their conditions for delivery, I want to stay away from priority because that kind of has a meaning under water law, their conditions for delivery and their right under their contract for delivery in water-short periods is really different one to the next. So they have different contractual rights, and then you add to that the fact that just physically delivering water is different to different units. We have the greatest difficulty delivering water to the . . . we contracted for two point two million acre feet of water to the San Luis Unit and so those are people that are delivered water off the Delta-Mendota Canal, out of San Luis Reservoir. That's two point two million acre feet of water out of the nine point two million acre feet of water, and we have the most difficult time delivering water to them because contractually they have the—they take the brunt of years when there is inadequate water. Other people are provided full water supplies, and they will take all of the reduction—it's the way their contract works.

Storey: Now, this would include Westlands, for instance?

Glaser: This would include Westlands. And Westlands would make up maybe half of the west side farmers, both as a matter of land and water rights under their contracts. But they certainly are the largest, (cell phone rings) and this is the commissioner,⁶² so I will take a call. [Tape off for a period of time.] So, recognizing, I'm sorry for the interruption, everybody works for somebody. I happen to work for the commissioner. (Storey: Not a problem.) So, you have these contracts, and the San Luis contractors, which includes Westlands. First of all, they take the first shortages in many instances. That's just the way their contract works, particularly given the fact that we deliver exchange contractor water, which is based on a historic water right, through the pumps, and then we deliver the west side water after that, at a lower priority. And because we've had all these restrictions in the Delta, so, first of all, in a water short year the west side guys take a bigger hit, and then we had all of these restrictions on our ability to pump within the Delta, and that fell on the west side contractors disproportionately to, say, the American River or water service contractors *north* of the Delta. Because they don't have to worry about the restrictions *within* the Delta. And then the other thing that happened to our water service contractors is that with the Central Valley Project Improvement Act eight hundred thousand acre feet of water supply was dedicated to fish and wildlife purposes, called B-2 water. And then in addition to that the Central Valley Project had to give up maybe three hundred thousand acre feet of water, in rough numbers, to an assured water supply refuges. So we gave up over a million acre feet of water that would have been available for allocation that is now going to other public purposes. And since the 1990s with the passage of C-V-P-I-A, and then the subsequent listing of species after species, it has been very difficult for us to deliver a reliable water supply to *most* of our water service contractors from year to year, but in particular for our west side water service contractors in the San Joaquin Valley.

And this became most pronounced in 2009 when you had all of these issues come together and we ended up with a ten percent allocation to the west side. Fifty percent of their lands are in permanent crops. (Storey: Um-hmm.) And so that meant they didn't raise any row crops to speak of that year—tomatoes for canning, broccoli, lettuce, these row crops

⁶² Michael L. Connor was commissioner of the Bureau of Reclamation from 2009 to 2014, before becoming assistant secretary of the interior in 2014.

which, by the way, support most of the farm labor. So when row crops are gone farm labor takes an inordinate hit. And so in 2009 they had to buy and pump groundwater. They over-pumped their groundwater and then bought water to keep their permanent crops alive. And it was a struggle to get through the summer and some farmers didn't make it. And so just recognizing you have these both contractual, statutory, and regulatory effects—some of it comes out of our water rights permits from the board. In the late '90s we ended up with a new condition, D-1641 is what its called, for conditioned our ability to take water under a state water right permit. And all of these things have accumulated to make delivery of water really quite difficult, particularly to certain contractual entities today. Now, in the year that we gave ten percent to the west side, we gave a hundred percent to the exchange contractors, hundred percent to the Sacramento River Settlement Contractors, we gave a hundred percent level to refuge water supply, and we gave, I think we might have given a hundred percent to Friant class one contractors that year. Everyone would have thought the project had a ten percent water supply, but our performance is measured by our impact to this significant sector because they're significant economically. They're significant as a matter of impact on individual operators, and it gets a lot of visibility. So, last year was actually a good year. We had a great winter.

Storey: Now when we say last year . . .

Glaser: Last year—2010. So, a year ago. A year ago we started to get precipitation, and it came gradually, and the snowpack built up, and then this last spring, when water starts to run off, our reservoirs all filled. And then we didn't even have a big runoff in the spring because it stayed really cool. And so water stayed in the snowpack, and the water came off really slowly, and we had really, really good supply conditions. And we had really good ecological conditions both in the streams and in the Delta. And because of that you're going to see fish jump back this year and next and in years to come. You'll see a spike that comes out of this really good year we had both on fish, and we had eighty percent supply to our west side contractors and a hundred percent to everybody else. And so that was last year.

So going into this year our reservoirs are all full. And our irrigation season really starts March 1. And so what kind of water year are we going to have for this upcoming water year starting March 1? Jury's really out on that because we're unable to predict that until we see what the precipitation's like between, like, October 1 and April, because remember we had nine million acre feet of water contracted. We have eleven million acre feet of total storage. And we probably have seven million acre feet of conservation storage. So we don't have enough *conservation* storage to cover one year of contracts. Unlike the North Platte which might have seven years of carryover storage, we don't even have one year of carryover storage. And so we live on the current water year supply, particularly given the fact we have all these other obligations to meet all these other public needs. And so what will happen this year will be defined between *now* and, probably, March. (Storey: Right.) And I will tell you, the last six weeks we haven't seen one drop of precipitation, so folks are going to start getting *really* nervous about what that means. Its got to start raining or we're going to have a really tough year.

Storey: Well, when you say we had a really good winter, basically, ten to eleven [2010 to 2011] . . .

Glaser: And a good spring. Because you had this really slow runoff. See, if we'd a had. If it had gotten really warm and got rain on snow all of that would have come off in a hurry, and the story would have been all the flooding. And then we would have had a bad water supply because we don't have storage. But because it came off so slowly, we were able to deliver water all the way through the year. San Luis Reservoir is going to fill this month.

Storey: Well, given the restrictions . . .

Glaser: And a few years ago it didn't fill at all.

Storey: Yeah. Given the restrictions we have on the Delta, did everybody get a hundred percent?

Glaser: No. Last year *eighty* percent to the west side.

Storey: Because of the Delta restrictions or . . .

Glaser: Predominately because of our restrictions on pumping that are a product of both our *permit* from the state and the conditions under the biological opinion for salmon and smelt.

Storey: But they did a lot better.

Glaser: Eighty percent's pretty good, but they can't live on one year. What they need is they need a reliable water supply from year to year. (Storey: Right.) And if we can't find a way to provide them that, then the west side is not sustainable as we know it today.

Storey: And I assume that the Isolated Facility is still *out* there but not moving very much.

Glaser: Topic for another day.

Storey: Right.

Glaser: I have to run along.

Storey: OK, good. I appreciate it. Let me ask you if you are willing for information on the tapes and resulting transcripts to be used by researchers.

Glaser: Sure.

Storey: Great. Thank you.

END OF SIDE 1, TAPE 2. DECEMBER 16, 2011.

BEGINNING OF SIDE 1, TAPE 1. APRIL 30, 2013

Storey: This is Brit Allan Storey, senior historian of the Bureau of Reclamation, interviewing Donald Glaser, Don Glaser, in his office in Building 67 on the Denver Federal Center on April the 30th, 2013. This is tape 1.

Well, since we last talked, and last time we talked a lot about San Joaquin Recovery Program, you've moved to Denver from the [Mid-Pacific] Region. Would you like to talk about that a little bit?

Leaving the Mid-Pacific Region

Glaser: Oh, I could. It was really hard to leave the Mid-Pacific Region and to turn over my responsibilities to another manager. Its not that I question anyone else's ability to manage the program as well as I did, and certainly many people, there are many candidates who'd probably do a better job, but the Mid-Pacific program right now, so many things are sort of right on the cutting edge, emerging social interests and there's so much unfinished out there. Its just really hard to move on within Reclamation to do something that's less authoritative and less well-defined. Something about my job out there, I had a very well-defined responsibility. I was the contracting officer for two hundred plus contracts; I had requirements of law to carry out, and I had directions of Congress given annually, and I had guidance from the department and the administration; and my job was just to get a bunch of work done through partnerships and a bunch of employees. Now as I am a team of one, working for the commissioner in a less defined capacity, its *different* and maybe feels a bit of a let down from what I was doing. The pace in California, with California water and even with the Klamath in the Klamath Basin, the pace is just incredibly high every moment of every day, and you kind of get to where you live and breathe it. And then when you go to something that's like serving as a special assistant to commissioner on very important issues has a different feel to it. (Storey: Um-hmm.) I don't know if that makes any sense, but . . .

Storey: Now, let's see, you came in January, I think, right at the beginning of January, end of December.

Glaser: Middle of December, yeah.

Storey: Yeah.

Glaser: So its been four and a half months. I'm acclimating a little bit. I certainly keep my days full with the issues that I'm working on, and they're very important to the administration. They're important to American public. So I don't mean to diminish the responsibility that I currently have. Its just not the same.

Storey: But, I thought I went on the Reclamation website and saw you listed as director of the T-S-C [Technical Service Center]?

Glaser: Yeah. (Chuckle.) Well the position I was officially assigned to, you have to have a position that you're assigned to, and at the senior executive level Reclamation only has so many senior executive slots. So, since the commissioner was intent on retaining me as part of his senior leadership team, they needed to have a position to assign me to, and the vacant position was the director of the T-S . . . Technical Service Center. But upon my appointment as the director of the Technical Service Center I was immediately detailed to "special assistant to the commissioner." (Storey: Oh, I see.) And actually Tom Luebke is running the day to day responsibilities of the Technical Service Center under Mike Gabaldon who's the director of

technical resources. And so for a period of eight months I've been approved to be in a special position of special assistant to Commissioner [Michael] Connor. (Storey: Um-hmm, so what kind of . . .) To work on very specific things.

Storey: Yeah. What are those kinds of—those issues you're working on?

Special Assistant to the Commissioner

Glaser: The principal ones where I carried on my responsibilities to support the commissioner on the Bay-Delta Conservation Plan development, and that role has not changed although maybe I have a more intense involvement today than even I did when I was regional director. The theory is I have more time to work on this therefore I should have more direct engagement, and, in particular, right now I'm looking at the financing and repayment of the Bay-Delta Conservation Plan, among other issues. I'm also assisting the commissioner with his responsibility under a court order to implement drainage service to Westlands Water District as part of the San Luis Unit of the C-V-P. (Storey: Um-hmm.) I'm looking at a few organizational things on his behalf, and I'm mentoring some emerging leaders in Reclamation. So it's a set of unrelated but specific responsibilities.

Storey: Um-hmm. But, like drainage, you were working on that as regional director also, and it seemed like it was, I'm not sure a "dead-end" is the right word, but it seemed like it wasn't able to get traction. And the last I think we spoke of that you were talking about Westlands taking over the responsibility, as I recall, or a consortium of the water districts. They were thinking of . . .

Glaser: Well, there's two parts to irrigation drainage service for Westlands. We're under a court order from the federal district court to immediately implement drainage service within our authority to Westlands Water District, and we have what's called a controlled schedule, and we've committed [to] the court to do that. And within our remaining appropriations ceiling for the San Luis Unit we have enough money, we have enough authority to request appropriated funds to complete drainage service to the central subunit of Westlands. And we've submitted a schedule to the court that says, "Here is the schedule under which we will carry out our responsibility to provide drainage service in the central subunit of Westlands." And we're doing that, basically, consistent with the feasibility report and record of decision from 2007 and 2008, that looked at our responsibilities for drainage service to Westlands and the most appropriate way to deal with that. So that's what we're moving forward on. And we're moving forward on that with no reservations and with due commitment and haste because the court has become impatient with us not meeting our obligation under the San Luis Act.

And as an alternative to that from time to time we have talked to Westlands about them assuming responsibility for providing drainage service in return for other conditions that they would like to seek from the United States. We actually worked very hard on that between, maybe, 2007 and 2010 and had come to a pretty good understanding with Westlands. There were a few outstanding issues when we discontinued those discussions and continued our litigation and the district court with the final ruling and agreement to the court to move forward with drainage service.

Storey: So, do we have a plan for providing drainage service?

Glaser: Absolutely. Yeah, it's a prescribed plan, very specific—the activities we're going to carry out. In fact, if you went out there today you would see that we're building a test facility that's going to provide for gathering of design data on how we will treat drainage water in place because we're going to—the plan *is* to treat all drainage water that accrues within Westlands service area without exportation of *any* product water. So we're going to treat it all in place. So we're building a test facility to test the current technology for being able to treat drainage water and dispose of the water and the constituents that are in the water safely. Which would be predominately salt and selenium. And we're also collecting design data within the central subunit of Westlands *on farm* to determine the design drain spacings and collector systems so we'll deliver the water *to* the new facility that would be built.

Storey: Very apropos, however, so . . . [brief interruption]

Glaser: Sorry for the interruption.

Storey: Where would we be building this? Is there an area or a site that's been selected.

Westland Irrigation District Treatment Facility

Glaser: Yeah, we have a site selected for both the treatment facility and, as part of the treatment facility, you will also have to have disposal ponds, and so we have preliminary designs on that were subject to our evaluation in the feasibility report, and now we're collecting design data to do the final designs and award the contracts. (Storey: Um-hmm.) We're negotiating with Westlands for repayment contract so that they will repay the *costs* of providing drainage service as required by the San Luis Act. So that's one part of the drainage issue that we're looking at, and we're always willing to consider Westlands' interest in assuming that responsibility, but there is no *plan* today for that to happen.

Storey: So I guess the negotiations changed over time. And by doing this in situ, in effect, we avoid the environmental issues of sending the water to the [San Francisco] Bay or to the coast.

Glaser: Yeah. Initially the San Luis Drain was going to take water to the Bay, and when that ran into permitting problems it took water to Kesterson, and we know what happened there when the selenium concentrates. It's really hard on migratory birds in particular and shorebirds and so there is a bar against us exporting water, and we're going to treat drainage water within the Westlands service area with no discharge—much like we're trying to do, that we've been working on with the Grassland Bypass for the northern districts, the districts that are north of Westlands.

Storey: Yeah. My understanding was that there was—that the water was entraining a *huge* amount of salt and other minerals. How are we disposing of that. Do we have to take it out of the evaporation ponds and carry it somewhere or . . . (Glaser: Yeah.) or have we gotten to that point yet.

Glaser: The minerals that are produced through the process that we'll employ will have to be

disposed of in a regulatory sufficient manner. Whether we turn it into a marketable product or whether or not its something that has to be disposed of through a certified disposal point remains to be seen.

Storey: OK.

Glaser: And part of the process today is to biologically treat the water before you physically go in and treat the water. So you—and we have an area, the Grassland Bypass Program,⁶³ where we've actually tested reuse areas where you apply these waters that are high in salt to salt tolerant crops and the crops will actually pick up much of the volume of salt into the crop itself. And so the product water you have to treat is less in volume, higher concentrates of minerals, but the elements themselves will be of lesser volume because biologically we're picking up a lot of that into salt-tolerant crops. Very, very interesting.

Storey: Yeah, it just sounds like it is.

Glaser: And we've been really quite successful in the Grasslands Bypass area in eliminating or reducing substantially the amount of salt and selenium and other elements that we have to deal with.

Storey: Um-hmm. And then I guess the plant material is going to have to be disposed of in some way?

Glaser: Oh, actually not. You know there is a couple of different grasses, one of them is a hay-type grass, that you can actually harvest, and there's a real market for it. It's a high demand hay crop. The use it in the dairy industry to augment hay because they need some of those minerals in the dairy industry, and it picks up in the crop. (Storey: Interesting.) And you can irrigate almonds and then there is a very salt tolerant crop that doesn't have much commercial value as a forage crop, but as a nursery-type crop has very high ultimate value. They use it actually, a similar crop, plant on golf courses, I understand, in Mexico along the ocean where there's not water, and they can actually irrigate with very, very saline water, for golf courses. So (Storey: Interesting.) yeah, it is kind of interesting. Its interesting to see.

Storey: What kind of Bay-Delta issues are coming up. I presume we're still studying the, is it called the Independent Facility now, the Peripheral Canal?

Bay-Delta Isolated Facility

Glaser: Isolated Facility. (Storey: The Isolated Facility.) Actually they're joint use facilities. So, let's see, this is now the end of April first of May 2013. The state has released the first seven chapters, in draft, of their Bay-Delta Conservation Plan. And they will be releasing the remaining five chapters in three weeks on their schedule—in draft. And these aren't public comment drafts, but they are going to be released as administrative drafts that the public will be able to view for purposes of gaining information. Document's really quite long. I understand its seven thousand pages long, just the description of the plan. And the state is also intending to post the administrative draft, the contractor's administrative draft, of the

⁶³ For more information, see "Grassland Bypass Project," www.usbr.gov/mp/grassland/ (Accessed July 2014).

environmental impact report [EIR], environmental impact statement [EIS] that is intended to be released as a public draft later this fall. And they're intending to post the contractor's administrative review draft, I think in the next week or ten days. And that document, I think, is twenty thousand pages long and it describes the alternatives that were looked at, and it describes the impacts of the proposed project from the state's perspective. And so we're right on the verge of the public having access to the full plan and the full draft environmental impact report, environmental impact statement, for the first time. And together they're very lengthy—approaching thirty thousand pages. And so the schedule then will be for the state to complete their planning document and the public review draft of the E-I-R/E-I-S and have those available in the fall, and that will serve as the foundation for their permit request under Section 10 of the Endangered Species Act for a permit to implement their Habitat Conservation Plan. Which will include conveyance as conservation measure number one and then twenty-one other conservation measures to deal with all of the species of concern. Very complicated document trying to deal with a very complicated issue. With a lot of history.

Storey: Why is the state doing this instead of Reclamation?

Glaser: Yeah, that's a very good question. The state has determined the best path forward, this goes back to 2006, in cooperation with their partners, including the Bureau of Reclamation, Fish and Wildlife Service, NOAA Fisheries, and California Fish and Game, now Fish and Wildlife, that the most responsible way to deal with the issues of interest in California was through a habitat conservation plan, looking at *all* of the species in an integrated fashion instead of a species by species approach that you get under Section 7 of the Endangered Species Act through biological opinions. So they're applying for habitat conservation plan under Section 10 of the Endangered Species Act. Section 10 of the *Endangered* Species Act is non-federal by its nature and so the applicant is a non-federal entity, and the state is the applicant under section 10 of the Endangered Species Act for this habitat conservation plan. Reclamation is their partner by agreement, but our obligations, Reclamation's obligations under the Endangered Species Act, are covered under Section 7 and so we could not be an applicant under Section 10 (Storey: Um-hmm.) because its non-federal by nature. We can be a participant, but we're not the applicant.

Its actually the reverse of what we've been doing to date. To date we've been consulting with NOAA Fisheries and Fish and Wildlife Service for the long term operation of the state and federal projects. And we've been doing that consultation under Section 7, and so it was our biological assessment, our proposed action that was consulted on, and the opinions were actually issued to the Bureau of Reclamation even though they covered the operation of the State Water Project. And so even though it covered their operations, it was our consultation, and they had to formally accept the findings of the consultation for them to get their coverage under state law. (Storey: Right.) Its not a elegant regulatory arrangement.

Storey: So, when their plan presumably is accepted does that mean we no longer have to comply under Section 6 [7], we are now absorbed into Section 10?

Glaser: No, actually Reclamation will get no coverage under Section 10, and so we will still have to consult with both NOAA Fisheries and Fish and Wildlife Service under Section 7 for the long term operation of the state and federal projects.

- Storey: This sounds to me somewhat like the Multi-Species Conservation Plan on the lower Colorado [River]. Yet I had the impression that was spearheaded by Reclamation and Lorri Gray [Lee].⁶⁴
- Glaser: Yeah, its similar to that, you know, the Multi-Species Conservation Plan, serves as a foundation for endangered species coverage on the lower Colorado and so in that regard they're similar. Its similar to the Platte River Recovery Program on the Platte River in Nebraska. They're a similar type of regulatory arrangements. The Bay Delta Conservation Plan is somewhat different in that you have the State Water Project that is bound to the C-V-P through the Coordinated Operating Agreement and Act of 1986. And that makes the regulatory arrangement being fundamentally different.
- Storey: I'm trying to sort of get my arms around does this do anything for Reclamation. For instance, in terms of NEPA and our responsibilities there, or is that another parallel track we have to go down.
- Glaser: Well, Reclamation will have a responsibility to evaluate and display the effects of its action, proposed action, *and* the alternatives under the National Environmental Policy Act. And so we will have to prepare an environmental impact statement, but so will Fish and Wildlife Service for the purpose of issuing the permit for delta smelt, and so will NOAA Fisheries for the purposes of issuing a permit for (Storey: Anadromous. . .) the salmon, steelhead, and sturgeon, and so will the Corps of Engineers for issuance of its 404/408 permits. Now, theoretically the environmental impact report and environmental impact statement being prepared by the state will serve all those purposes—that was the intention. Whether it will or not remains to be seen. We haven't seen the entire document. We've just received the entire document, and we're reviewing it to see if its adequate for our purposes. Fish and Wildlife Service will have to determine [whether] its adequate for their purposes. NOAA Fisheries will have to determine if its adequate for their purposes, and ultimately the Corps will have to determine its adequate for their purposes.
- Storey: Very complex.

"There Really is No Precedent for What We Are Doing Here"

- Glaser: Very complex. There's not been an undertaking quite like this—there really is no precedence for what we are doing here. The Northwest, the Columbia Basin, is the closest you really come to something that is this complex regulatorily. (Storey: Um-hmm.) There you'd have Bonneville Power, the Corps of Engineers, the Bureau of Reclamation, tribal interests, and a range of fisheries that are (Storey: Public utility districts on the Columbia)—so you have something that similar in nature, and you have anadromous fish that are under the jurisdiction of NOAA Fisheries, you have resident species that are under the jurisdiction of Fish and Wildlife Service. So you get this broad range. Up there it's a little more complicated even so because they have multi-state jurisdictions on the Columbia [River] whereas on the Central Valley its all confined with the boundaries of the state of California except for water we import from the Trinity.

⁶⁴ Lorri Gray Lee, regional director in the Lower Colorado Region (2006-2011) and the Pacific Northwest Region (2011 to present).

Storey: Yeah. So, is the Isolated Facility looking good still, or looking too expensive or too complex, or what?

Glaser: Well, it is certainly complex, and it is certainly expensive by most Reclamation standards. The last cost estimate that I saw for the dual tunnels that are going to convey water from an intake up just south of Sacramento on the Sacramento River to the Tracey area to the existing state, federal pumps, the cost of constructing and mitigating the direct effects of and operating those facilities is in the range of sixteen billion dollars, with a "B," sixteen billion dollars and so that's a significant investment. I'm not aware that—Reclamation's share of that is yet to be defined, not defined in the draft as it's currently prepared. The benefits analysis that's being done by the state hasn't been completed and made available to either us or the public, and so there's a lot of work yet to do on what our proportionate share is. But the working assumption is if we convey water through those facilities—the facilities will be owned by the state of California, and they'll be part of the State Water Project—and we would convey C-V-P water through that through some kind of a conveyance arrangement or agreement. And the assumption is if we reserve a certain amount of capacity we should be obligated to pay that proportionate share. (Storey: Uh-huh.) It's not an unreasonable assumption. And so assuming that we maintain sort of the historic split between the state and federal project on exports and going clear back to the Coordinated Operating Agreement being put in place in 1986 that split has generally been somewhere around forty-four or forty-five percent C-V-P exports and fifty-five or fifty-six percent State Water Project exports. So if you split on that, that means the United States would be obligated to pick up forty-five percent of sixteen billion dollars over time. And then we would have to determine under federal law how we're going to recover those costs to determine whose obligation they are and to make sure that we have arrangements in place to recover those costs.

Storey: Correct me if I'm wrong, I guess my impression is that the State Water Project is delivering municipal water to Los Angeles, but the Reclamation part of the Central Valley Project is *not*, is that correct? I mean directly. You know, they do transfers and things.

Glaser: We have our defined service area, and our defined service area for the C-V-P generally runs from Redding at the north to somewhere north of Bakersfield in the south, and generally covers [the valley east to west] . . .

END OF SIDE 1, TAPE 1. APRIL 30, 2013

BEGINNING OF SIDE 2, TAPE 1. APRIL 30, 2013.

Defined Service Areas

Glaser: So that would be the C-V-P defined service area. And as a matter of our permit conditions we have to deliver C-V-P water within that defined area (Storey: OK.) for specified public purposes. And I'd have to look, but I would say that the C-V-P, seventy-five percent of our water goes to agricultural purposes and twenty-five percent of our water goes to municipal and industrial purposes. Now, the Santa Clara Valley is included within our service area, and our service area actually extends to the Monterey Peninsula (Storey: Right.) so those are areas that are outside of the Central Valley as it would be defined.

The State Water Project, they have a defined service area, and their defined service area they have some service, riverside service on the Feather [River], but their exported service area generally runs from Kern County south towards the L-A basin, clear to San Diego and out on the Mojave Desert, but they also serve clients, customers, within the Oakland or the Bay Area, and they also serve Santa Clara. So Santa Clara's the one contractor that's a significant contractor for both State Water Project water and Central Valley Project water. Of course they take their water out of San Luis Reservoir by (Storey: Through our facility [tunnel], I guess.) facility that just diverts water directly from the reservoir to their service area. And so C-V-P water *does* not get delivered to the L-A service area. Now, we often enter into arrangements where our contractors will do an unbalanced exchange with Metropolitan Water District—they have to find a place—or Kern, they have to find a place to store water and so they will send their water to storage in either Kern's bank or Met's Diamond Valley [Lake] in return for water being returned to them, a lesser quantity of water under what we call an unbalanced exchange.

Storey: We talked about that in the last interview, I think.

Glaser: And, you know, we have to be compliant with the terms in our permits, and so there are these arrangements that we've entered into—the Central Valley Project Improvement Act gave the Central Valley Project authorities that other projects don't have. And it was meant to encourage the more efficient use of water by allowing (Storey: Um-hmm.) by allowing us to enter into different types of institutional arrangements to transfer and exchange water. And I think the expectation at the time was it would go from the lower economic uses to the higher economic uses, and there actually were fees set up that we would recover that would go into the restoration fund based on those transactions. What we found over time was that the irrigated contractors were reluctant to give up their water, and so what they tended to do was to move to higher value crops. And we've seen an incredible conversion in the Central Valley in our cropping patterns in the last thirty years. So it achieved the objectives, just in a different manner. The other thing that we've seen, particularly south of the Delta is in the San Luis Unit almost exclusive use of drip irrigation or micro drip for irrigated purposes—even in their row crops because of our difficulty in delivering reliable water and the cost of water that does ultimately get delivered. And so they've gone to higher valued crops and much more efficient ways of delivering water.

Storey: Interesting. Reclamation, of course, we have different standards for how we contract for M&I water and for ag water. Does the State Water Project have a differential like that too, and the reason I'm asking is, going back to the Isolated Facility, I'm wondering if the urban areas are going to be picking up a bigger share of the Isolated Facility because of this?

Isolated Facility's Cost to Urban Centers

Glaser: Yeah, that's really a good question. It gets to the *heart* of the difficulty of determining how we're going to assign and recover costs for the new facilities—or whatever the obligation is that will fall on state contractors and federal contractors who have their water delivered through the new facilities. On the state side, they're much more like a utility. They have a utility charge, and they do not have different water recovery practices between different customers. And so they generally pay proportionate to the water that they receive through

the State Water Project—as a general rule.

Storey: And which I understand is quite bit higher than Reclamation water, generally, or historically it has been.

Glaser: Well, the State Water Project actually recovers *all* costs of providing, as a general rule, *all* costs of providing water service through the State Water Project. All costs. The Bureau of Reclamation, in general, in the C-V-P in particular, that's not been our historic arrangement. We were authorized in a different time for a different purpose so irrigation pays their assigned costs, with no interest, over forty years. M&I pays their assigned costs with interest. Certain purposes are non-reimbursable as general public benefits. That would be flood control or recreation or navigation. We have power generation that we market surplus power from the project, that is power that's in excess to that needed for project purposes, to preference customers, and the cost of providing power is recovered. Their assigned costs and their direct costs are recovered with interest through the power rate established by Western Area Power Administration for preference power. And to the extent that certain irrigated contractors cannot pay their full costs, they do not have the ability to pay their full costs, the assigned costs, then those can be assigned to power through aid to irrigation, and we have any and all parts of that on the C-V-P.

And so on the state side, their distribution of costs for the conveyance is really quite simple to calculate unless there's going to be some departure from that as a matter of public policy. On the federal side, not near so simple. And then we complicate that by having the responsibility, as a project responsibility, to provide refuge water and so the conveyance water south of the Delta will have an assigned cost to it, and we'll have to determine how to recover those costs. And then we convey water through the pumps that go to our exchange contractors, and exchange entities, and this is water that is provided under very favorable terms to them. Actually Friant picks up the cost of operation and maintenance for providing that water to the exchange contractors south of the Delta off of the Sacramento River in exchange for Friant being able to use, or the C-V-P being able to use the water in the San Joaquin River which the exchange contractors have a right to (Storey: Um-hmm.) for the Friant Unit. And the first water that gets conveyed through these new facilities, should we enter in an agreement to use it, will be for the exchange contractors *and* the refuges because they do have priority at the pumps. That's how we've always *treated* their water. This is a point of aggravation for the west side and contention from their perspective. But it has been our long-standing practice, and we believe our obligation as a matter of contract and law. And its not yet determined how that million acre feet of water will be paid for. It gets conveyed for exchange contractors and the refuges. Its clearly understood the exchange contractors will not be responsible for the cost of their eight hundred and eighty thousand acre feet of water that gets conveyed to them (Storey: Yeah.) because when they gave up their right to use their water on the San Joaquin it was under very specific terms, and I cannot imagine any circumstance where they would agree to pay the cost of conveying the water through new conveyance. They wouldn't necessarily object to us doing that. They just will not do it to their disadvantage.

So, lot of stuff to work out yet; its complicated; and once we determine we have a project and we know how the project's going to operate and we understand the yield from

the project. Then we will have to sit down with the state and ultimately our contractors to assign these responsibilities and determine how this cost will be recovered. We're actually in the process of doing that right now. You can see on the table between us here these piles of paper and then the bookshelf over here. Most of this deals with the financial aspects of the B-D-C-P, how costs get assigned and how they get recovered, and . . .

Storey: B-D-C-P–Bay-Delta Conservation Plan, right. Just to make sure I'm on the same page.

Glaser: You're on the same page.

Storey: What was going on with Klamath in the period from, I think it was December of '11 until you left? Are you doing anything with Klamath now?

Klamath River Basin

Glaser: Actually I don't have much involvement with Klamath. From time to time I will get asked about my recollection of some policy decision or how I happened to leave something for my successor because we clean up very few issues during our tenure. These are long-standing problems that have *long* range solutions.

Several things going on in the Klamath that are really significant. One of them right now is the—and they're parallel, somewhat, to what's happening in the Central Valley. We are consulting with NOAA Fisheries and Fish and Wildlife Service on meeting our obligations for resident species for Fish and Wildlife Service and anadromous species for NOAA Fisheries. Generally salmon and steelhead for NOAA Fisheries and resident suckers for Fish and Wildlife Service—resident to the Klamath Basin. And we right now have opinions that, biological opinions, that conflict with each other meeting the obligations under one puts us outside the requirements of the other, and so we're re-consulting on both opinions at the same time with the both NOAA Fisheries and Fish and Wildlife Service. Our hope is, actually, to produce one biological opinion that will be certified by both NOAA Fisheries and Fish and Wildlife Service. A joint biological opinion. Its not clear that we will be able to achieve, but that would be our aspiration. It's a little difficult because NOAA Fisheries and Fish and Wildlife Service have a little bit different processes for approving their biological opinions, and so we're just working our way through that now. We're very close to having new opinions that will support each other instead of conflicting with each other. So that's one thing that's under way right now. At the same time there was a study that was being conducted along with an environmental impact review of the effects of removing the private dams on the Klamath River. There was a FERC relicensing of these four private dams, and as a possible alternative to relicensing them under the Federal Energy Regulatory Commission's jurisdiction, that there would be a voluntary agreement to remove these dams and recover the Klamath River to Upper Klamath Lake. And that is an issue that's playing out right now. That's not being done under the jurisdiction of the Bureau of Reclamation. Its being done under the jurisdiction of Interior, and we're just a participating party. And then, of course, we just have this year's water year on both the Klamath and the Central Valley which are just *extremely* dry water years that are going to create a very, very difficult operating conditions for the particular water year that we are in.

Storey: Well, I'd like to talk about those, but I know that you have an 11:30 conference call so why don't we resume later.

Glaser: OK.

[Tape recorder turned off until about noon.]

Storey: . . . about the fact that it looks like dry water years in the Central Valley and on the Klamath. You had just started, I think.

Glaser: Yeah. Its—since 2007 there's been a series of near record dry water years in the Central Valley, and even on the Klamath with the exception of 2011, which was an incredibly good water year. And when you have a tough water year like we have this year, its not only difficult to deliver water under our contracts, it is also really hard on species that are dependent on cold water in the system to support migration and spawning. And so cold water is going to be a real premium this year, in the Central Valley. And we actually manage cold water in all of our reservoirs to release at critical times to support spawning. Shasta [Dam] actually has a modification, the temperature control device that allows us to pick the particular temperature of water out of the reservoir at any given time to manage the temperature targets downstream of Shasta for fish needs. We manage water temperature on the American River below Folsom the same way. So when you don't have cold water, and a lot of the cold water in the system gets stored in the snowpack, and there just is no snowpack in the Sierra Nevada. Its going to be a really tough year.

Storey: But one Murillo has to manage . . .

Glaser: David Murillo, the new regional director is on a steep learning curve to understand how to operate the C-V-P, because operation of the C-V-P is uniquely and distinctly different than any other place I've seen in the Bureau of Reclamation for water operations. The Central Valley Project has relatively little storage for the amount of water that it contracts for, and it relies on water that's stored in snowpack, and that's generally the water supply for both the state and federal water projects. We contracted for more water than we have conservation storage in the C-V-P. So we don't even have one year of carry-over storage in the C-V-P. And so every year is a new water year, unlike the Platte or the Colorado [rivers] where we may have five-, six-, seven years of conservation storage relative to contracted water obligations. (Storey: Yeah.) That's changing a little bit with instream flow requirements. Still you have substantial carry-over storage in those reservoirs. You don't have that in the Central Valley—so [it] makes operations a year-to-year event. I never watched weather so much as I watch weather in California.

Storey: So is there pressure from the water users to change that? Are they always wanting more storage, more storage?

Storage Limitations on the CVP

Glaser: Oh, yeah, about storage. Well, actually as part of the CALFED Bay Delta Restoration Program. When they put together CALFED back in the '90s and early 2000s, as part of that

there is the storage studies, the CALFED Storage Studies that were authorized and are underway to look at new storage in the Central Valley in conjunction with all the other systems reoperations and improvements that were intended to be pursued for fish. And much of the storage wasn't going to be for water supply. Shasta enlargement—the principal benefit from enlarging Shasta is to increase cold water pool for temperature management for fish, particularly winter run salmon. (Storey: Um-hmm.) So even the studies themselves are different than you would have typically seen. Whereas before we would have looked at storage as it relates to either flood control or water supply, now we look at storage as a way to augment cold water to meet temperature objectives.

Storey: But that brings another interesting question to mind. One of the issues that we've been dealing with has been our ability to pump out of the Delta. So if the Isolated Facility is put in place, does that increase the water supply just sort of automatically or are there still issues?

Glaser: Yeah, one would think if we were going to spend sixteen billion dollars that the result of that would be a larger and more reliable water supply south of Delta. That's not the case as of today. The initial permitting criteria for the Bay-Delta Conservation Plan actually produces no greater yield than we get today out of our biological opinions.

Storey: With the pumping restrictions in place?

Glaser: With the pumping restrictions in place.

Storey: So we would not see . . . well, would we see a more reliable water supply in the sense that there would be fewer interruptions, or . . .

Glaser: Maybe a little bit more predictable, but not necessarily more reliable. We would have more operational flexibility. So it begs the question, "Why in the world would we invest sixteen billion dollars if we're not going to get any more yield than we have today out of this state and federal project?"

Storey: Yeah, that's quite a question.

Glaser: So there's a lot of different perspectives on that. First of all the decision *hasn't been made* that we're going to construct the new facility. But there are a lot of other issues that are in play. The first being you cannot assume in the future that the current biological opinions are the most restrictive operations we're going to see, because if the species continue to decline and the state and federal pumps are one of the few knobs that can be turned, and they are the ones that are regulatorily controlled, you have to assume that operations are going to become more and more difficult in the future given the fact that species are not responding to the current biological opinion. So that's the first thing. The second, we're experiencing sea level rise as a phenomenon now in the Pacific Ocean, and as the sea level rises it take more outflow from the Sacramento and San Joaquin rivers to maintain the same salinity levels in the Delta. Because you have more hydraulic pressure from the ocean pushing the salt *in* because you have an elevated bay and Suisun Marsh, and that will create pressure for salts to come further in the Delta. So you have to release more fresh water to balance the location of that salt within the Delta. And there are a lot of people in the Delta that rely on pumping in the

Delta. I think there's a million acre feet of pumping *in the Delta* that's not related to the state or federal project. And so they're very concerned, as is the State Water Resources Control Board, on the salinity levels in the Delta, and that could affect the ability to export water. And then you have just the vulnerability of just the levees in the Delta to failure, either in high flood events or through seismic action. And so you put all those things together, and it says its prudent to look at an investment where you can take water out north of the Delta, out of the Sacramento River, as a hedge against all these other issues. Its not clear today what the finances are relative to the B-D-C-P, whether or not there's an ability to repay this investment based on the current contractual arrangements we have. That's yet to be figured out.

Storey: Um-hmm. Its interesting. And I assume a lot of those Delta pumpers, I assume they are pumpers, have very early water rights, too because that was an area that developed early in the 1800s, I believe, wasn't it?

Delta Water Quality

Glaser: Yeah we won't talk very much about who has senior rights over whom, and the quality of that water that they diverted. Water in the Delta arguably historically was quite saline during the summer and fall as natural flow in the river fell off. And it is the storage and conveyance of state and federal water that keeps much of the Delta fresh today. And so, whether they want to acknowledge it or not, the farming in communities and municipalities, and other water users in the Delta *benefit* from the state and federal water projects dragging their Sacramento River water across the central and south delta. And benefit from our release of water from storage to move to the pumps for the state and federal projects. A few years ago Contra Costa Water District built a new intake to their system, and they built it in the Victoria Canal, which is the canal that leads to the federal pumps. And in part their facility is built there to improve the quality of water that they pump based on their water right in the Delta. (Storey: Um-hmm.) So in the Delta its both about a right to pump but its also about the quality of water that's available, and the state and federal projects *unarguably* improve the water quality in the central and south delta with our current operations. And if you lived in the Delta you wouldn't want us diverting water in the north Delta because it will result in lesser water qualities at certain times. I think our reports will probably show that.

Storey: And the Bay-Delta Conservation Plan is addressing the issue of water quality down there or not.

Glaser: The board will have to permit whatever our new operations are, and they will consider water quality in the Delta as part of the permitting process, and the environmental impact report and environmental impact statement will have to evaluate the effects of water quality in the Delta and display those.

Storey: And, of course, the Delta water users are going to have an opportunity to comment.

Glaser: That's part of the public process.

Storey: Interesting.

Glaser: Now, for me, just personally, and as, maybe, a public official. I would like to see us get a complete draft plan out, and I would like to see the complete draft environmental impact report and environmental impact statement out as quickly as possible. And it doesn't even matter that I agree with everything in the plan. Or that I've even reviewed everything in the plan. I think the public debate will improve with the reports out so that people are commenting on the same set of facts. Because right now people are *speculating* on what the plan may or may not say and what the analysis may or may not show. And its creating a really difficult dialogue because we're not working off the same set of information. Now that's not to say it's easy when we're operating off the same set of information. It's a public . . . it's a social issue, and it's a complex social issue hasn't been solved in fifty years, and I think there's nothing to say that everyone will agree with what's proposed in the Bay-Delta Conservation Plan. I think its fair to say not everybody will agree (Storey: Yeah.) with what's proposed in the plan. But at least they will know factually what is being proposed. It will change the nature of the debate, and I think its really important that we do that.

Storey: You have so many interests, you know, environmental interests, recreational fishing interests, I guess the commercial interests are looking at the salmon issues probably . . .

Glaser: Just more than that. You're talking about water that touches the entire state all the way from Redding to San Diego. Its just a very complex social issue. I've spent five years looking at this pretty thoroughly, and I would not like to be the decision maker that, if I had the authority, I would not like that authority invested in me. It would be very difficult to find the right public decision in this because there are so many interests. And there's going to be many dissatisfied and disadvantaged interests regardless of what the decision is.

Storey: Last time you talked, I think, about when you began work how the public interest was viewed differently than it is nowadays. How we would condemn property and things. Move forward "in the public interest." And how that's changed a lot now. But how do we arrive at that.

"In the Public Interest"

Glaser: Our processes are even different today. (Storey: Yeah.) You know, I look back on the 1970s and that was like a nanosecond ago. Well, its forty years. But it doesn't seem that long. It seems all like contemporary sociology to me. But the world has changed for Reclamation, and public agencies, in general, since that period of time, particularly for western agencies, where you have such a *large* federal presence, both in land and water management, makes us different than the East, by the way. Distinguishes us as a matter of process and public policy. . . .

END OF SIDE 2, TAPE 1. APRIL 30, 2013.

BEGINNING OF SIDE 1, TAPE 2. APRIL 30, 2013.

Storey: This is tape 2 of an interview by Brit Storey with Don Glaser on April the 30th, 2013.

Glaser: Probably the most *distinguishing* thing about the West is the presence of the federal government in land and water management related issues. (Storey: Um-hmm.) So how do you get to the public interest? I've actually been thinking about that for thirty years, and, of

course, like everyone else my thinking has evolved—or its ebbed and flowed. In fact, when I was the executive director of the Presidential Commission on Western Water Policy back in the mid-90s and late 90s, that's what we were looking at. You know, how do you look at all of these different federal responsibilities and get to a decision at the watershed level given the conflicted nature of all of these operational, managerial, and regulatory responsibilities that the federal government has? And then how does that interface with the state and local jurisdictions was the purpose of the commission's period of inquiry. And actually we got it pretty right at that time—surprisingly right. And I think it comes down to this. From my perspective, and having worked at B-L-M as the state director here in Colorado, it gave me a different angle on the same issue because they deal with the same things—how do you deal with the use of public lands for timbering or minerals or grazing or endangered species or recreational or ecological purposes. How do you balance between those different public interests on public lands. And using the same requirements of law and the same obligations as a matter of law. And the easy answer is, for me, that I think that the closer you get to the community level the more opportunity you have to make a consensus decision. Because I believe in the community, and define the community in any way you want to, but in the community, society in general has a greater appreciation for the need of a sustainable ecology, recreational resources, esthetical values associated with natural landscapes, wildlife, economy, jobs, utilitarian nature of federal resources. They have a better—at the local level you understand that better. If you live in Grand Junction you understand, sort of, how you fit, your interests fit within all these broad ranges of public interests relative to public lands and water. And the bigger the community gets, the less defined that is at the individual level.

So the closer to the community you get, I think that the best chance that you have to find the right balance between all these different public interests. And the further away you get from that the more you get advocacy-based perspective. And by the time you get to the national level of *anything* the issues have become so homogenized that it is the position you've taken on a particular interest of public policy that becomes compelling; not the resources itself. So what do I mean? By the time you get to the national level, if you take water, if you're a national water interest group you have very defined ideas about the Endangered Species Act and what should or should not happen to it. And if you're an environmental interest group at the national level, you have very defined interests about the Endangered Species Act and what should or should not be done to it. And those do not look—those are adversarial at that level. In the community you don't have these real ideological positions as a general rule, because people see the value in all of that. It all contributes to the fabric of the community. People need jobs, and they need food, and they need drinking water, and they love fishing, and they love cold fishable, swimmable water, and they love access to public land, but they realize that you do need to have natural gas and trees need to be—forests need to be managed or we end up with catastrophic fires—and the grazing somehow fits on the landscape. They understand all that stuff. But by the time you get to Washington, the *interest* groups are ideologically *driven* on those various issues—whether its property rights or endangered species. And so we don't—I don't know if we have a hope in solving these problems at the national level—issues like the Bay-Delta Conservation Plan. Maybe we have a chance to solve it within the Delta, but we're testing the size because it's the scope of California. It isn't the process because it worked on the Platte. It worked on the upper Colorado [River]. We have the upper Colorado Fish Recovery Program—been a *great* success. We got a Multi-Species Conservation Program on the lower Colorado

because look at the community of interest down there.

Now you take that same process and try to apply it statewide in California on something like the Delta. I don't know if we've stretched our ability to find consensus. (Storey: Hmm.) And so I think the scale of the issue drives the ability to *achieve* what we would think of as a consensus decision. And you're *always* going to have people that are outside the process because they choose to be or that's where their interest takes them. I don't know. I think, I believe this to be true, we don't have difficulty designing, permitting, and constructing things today any more so than we ever did. The difficulty comes from getting consensus on what it is that we do. It isn't about implementing the decision. Its about making the decision that is difficult today. If we knew what we wanted to do in California relative to the Bay-Delta, getting it done, including funding it, would not be a problem. We're talking about a trillion dollar economy in California. So if we knew—if we could make the decision on what it is that we wanted to do and get sufficient support, a critical mass of support for that decision, implementing it would not be the problem. The problem today is getting to the decision of what we should do as a society.

Storey: One of the changes that you and I have seen is the evolution in the '60s and '70s of this attitude by the American people that it isn't just the westerners that own the West, its also "us." Those of us here in the East. Those of us here in *Denver* who have an interest in recreating on the public lands, and so on. And there's a great divide between, say, the interests of Denver and the interests of Grand Junction in the public lands, in public projects. How do you get that reconciled?

Actions of the Federal Government

Glaser: Yeah. I—my take on its just a little bit different. I think the East is different from the West in that there's not a lot of public land in the East, and most land is held in private ownership, and as a *general* rule the federal government didn't develop water and power in the East. (Storey: That's right.) T-V-A's a little bit different. The Corps has flood control, navigation, and power generation on certain navigable streams, but as a general rule they didn't maintain large land bases and make investments in the day to day utility of water in the East. And so, in the East most issues are not major federal actions as they are in the West. In the West almost every resource-based decision is a major federal action. Its either tied to Forest Service, tied to B-L-M, its tied to military reserves, its tied to Indian reservations, its tied to Reclamation water development. Some of *those* are laid on top of each other and conflict. But because there's so much federal activity in the West that's reserved to the United States, in some states, like Nevada, I think ninety percent of the land mass is still held in federal ownership. (Storey: Yeah.) And so its very difficult to get *any* decision there relative to the *use* of resources that is not a federal decision, administered by federal agencies, regulated by some other federal agency. You don't have that situation in the East. And so just how society makes decisions is not the same.

But let's get to this values statement that you raise. So there's a regulatory difference, or I mean just a *practical*, physical, decision making difference between the East and the West. But this social difference between maybe rural and urban, its not so much, even, East and West. It may be rural and urban. And the bigger the urbanized area the less people are

tied to the land. You know, the funny thing about our kids' generation, we're kind of in-betweeners, you and me, but our kids' generation it's the first generation where I would estimate that ninety percent of the people have no tie to agricultural activities in the United States. Our generation, many of those still came from the farm and moved to the city. Or at least our parents did. You know, before World War II great number of people greatly tied to historic farming activities in the United States. But through World War II and then post-World War II lots of movement to the city, and then with generations you—my generation you went back to visit the grandparents *at* the farm. Next generation—my kids come to visit. My grand kids come to visit me in the metropolitan area of Denver, and we go to a Rockies game, whereas I would have put up potatoes or stacked hay. So you remove from the land much more so than any time in the past. And we have more leisure, and we have more money, and so we're really invested in recreational activities. My generation, the average kid didn't ski, and there were no mountain bikes. And you didn't backpack and climb fourteeners.⁶⁵ You might have hunted or fished, but our whole view of lifestyle and lifestyle choices has changed and because of that public lands and rivers they hold a different place in the hearts and minds of the American public. And, you know, we kind of like rivers that are fishable and swimmable and produce recreational opportunity and have ecological values.

I was thrilled. I was up at my cabin this weekend, up in South Park, and for the first time in the twenty years I've been going up there had three moose wander onto my little property right below my cabin. Fifteen feet away. And, to me, as a person that dwells in the city but lives in the West, you know, things like that refresh your soul. But you live in the city, you don't necessarily experience those same things. That's not where you find your recreational release. My kids don't. My kids find it in going to play coed softball and then going to the brew pub after the game. They have different values and interests, because they're becoming typical urban kids, and the generation behind them, I think, will be urbanized—even here in Colorado. And so I think a couple of things are happening, I mean you know. You people just have a strong affinity in the West for public lands and this great, majestic, natural resources of the West. You know, I've traveled all over the world, and it's hard for me to see prettier places than what we have in the United States. And we're coming to appreciate that, and so there's this sort of protective nature. We would like to reserve it all the way it is or better. And so it stacks up against the pressure to continue to extract commodities from it—whether now it's fracking for natural gas, or whether it's a press for oil development, or quest to be more energy sufficient, or whether it's just to recreate. We have conflicts between recreators and people who have ecological values and goals. I don't know. It's becoming much more complex (Storey: A-T-Vers versus backpackers.) or mountain bikers versus wildlife advocates—I mean wilderness advocates, because you don't mountain bike in a wilderness area. (Storey: Yeah.) It's mechanized travel. So, you know, you got these pressures, and I find out that as a fly fisherman I may not be—I might not have the right ecological values because I'm interested in a game fish as opposed to a native fish. And I'm interested in a cold water fishery over a warm water fishery. And cold water fisheries not natural, and it's not conducive to native fish. It's just a very complicated thing. It was not near that complicated in 1970.

Storey: Yeah. That's true.

⁶⁵ Referring to a common mountain climbing hobby in Colorado of climbing some or all of the state's mountains which rise to 14,000 feet and above in elevation.

Glaser: And I don't know what to make of it. You know, I like the values of our society. The problem is they *do not* line up very well with public decision making processes. And unfortunately different interests tend to need to vilify their competing interests to make traction, you know. When I was at B-L-M I had certain wilderness interests that just absolutely hated cows. Just hated cattle on the public . . . thought that was just the worst. Just about the worst you could do. They maybe would take natural oil and gas development over cows because grazing was just the death knell for public lands. And so they wanted to vilify the public-land rancher. Well the public-land rancher pushing back on that wants to vilify the environmental extremist.

Storey: Yeah. "They want to bring wolves to my herd."

Glaser: Or they want to take me off the public lands, and we've been grazing the public lands for a hundred years in our family. And the same with water development. You know, we develop water in a different time. The San Joaquin River was developed with the idea that we were going to divert every second-foot of flow in the river at Friant Dam in the Friant-Kern Canal and the Madera Canal. And now we're kind of in a different time and people who are one side of that issue see the people on the other side as extreme. And they don't mind it if punitive actions are taken against the other person, and it creates a very uncivil climate under which you're trying to find civil social solution. It just makes it extremely difficult. (Storey: Um-hmm.)

I was thinking about this last night. I was reading a public policy report that's going to be released here in the next day or two from one of the public policy think tanks, and those things kind of intrigue me, and I read a lot of that stuff. And I was beginning to wonder if I was becoming less effective as a public decision maker, because I was becoming more interested in the sociology or the social debate or the bigger picture and less focused on the individual tasks in front of me that day. And I've always been one to spend—a bit odd. Because I've always been interested in sort of this evolution of social thinking relative to natural resources in the West; particularly as it relates to water. And so I read a lot about that, and I *think* a lot about that. But my job has been to carry out these very specific responsibilities for Reclamation, and I never confuse where my interest is with where my job is. On the Central Valley Project I was the contracting officer for contracts that were—we entered into *forty, fifty, sixty, seventy, eighty* years ago. And I didn't have the luxury to judge whether or not the contract was justified through today's eyes. It was a contractual obligation the United States made, and I was the contracting officer, and I *had* to carry out the provisions of that contract to the best of my ability within all my other federal and state mandates. But at the essence of it my job wasn't to carry out the Clean Water Act. My job was to administer the Central Valley Project and to deliver water and power *services* consistent with federal and state law. And I'm mindful of all those responsibilities, and I have permits that define how I operate to the different jurisdictions, but my fundamental job was to operate the state and federal project. I mean to operate the Central Valley Project. So my point is this, *for me* to get too caught up on whether I thought the contract was good or bad or right or wrong in a contemporary time, then I'm the wrong guy to be in charge. Congress decides that. Or the courts decide that by passing other regulatory oblige . . . or the State Water Resources Control Board of California determines that. That's their responsibility to define the permit conditions to protect the water quality of the state of California and to make

sure other water interests are protected both in the public trust and it relates to somebody else's water right. And so you get a little conflicted sometimes thinking about larger public policy issues, while you're trying to carry out a specific set of delegated responsibilities as a public servant.

Storey: Um-hmm. What about changing tacks a little bit? What about—what kinds of issues do we have to deal with like over on the Santa Clara area?

Water Issues for Santa Clara

Glaser: Santa Clara is a really interesting C-V-P and state water contractor. Course, you know, they're principally known for (Storey: For garlic, is it, and tomatoes?) actually they're principally known for their teleconductor industry—Silicon Valley (Storey: Oh, really?). Yeah, so you have San Jose and Santa Clara right there, and incredibly important part of our California's economic engine. And so Santa Clara Water Districts serves much of the water needs of the valley, and then they have, in addition to that, some agricultural that's interspersed there that is part of their community—historically part of their community. And so because of that they are very contemporary. They have a very contemporary board. Their board is made up of a very wide range of public thinking from more traditional water user interests to more environmentally sensitive, or inclined, public policy officials. And because of that, you see a great emphasis on wastewater reuse and recycling in the Santa Clara Valley, and Reclamation, through Title XVI of the Omnibus Bill of 1992 has invested a lot of money in wastewater reuse and recycling in the Santa Clara service area.⁶⁶ And so they make very effective use of the water that they have there, both as an environmental ethic but as a water supply strategy. And as a C-V-P contractor, it makes them just a little bit different than how some of our other contractors look at their rights and responsibilities. Doesn't mean that all of them aren't more or less aware of the need for water conservation. You know, nobody's more efficient on applying agricultural water than Westlands Water District, out of necessity. People wouldn't believe that of Westlands, but it's just true. How did they do it—as a matter of environmental ethic? No, they did it because it was a smart business decision given the value of water and its unreliability to their service area, and it was just a way that they could stretch the conjunction use of their surface and ground water that's available to them. And keeps them on the cutting edge.

So when you get into the Santa Clara Valley, their ethic is a little different because their social composition or makeup is a little bit different. (Storey: Interesting.) And it's one of the reasons you can't think of C-V-P contractors as homogenous individuals. Just north of the Delta your senior water rights guys, the Sac River Settlement Contractors, they're going to do things one way north of the Delta, the water service contractors are going to do it a little bit differently. On the American River the urban interests are going to view Folsom operations and water on the American River a little differently. Over the Stanislaus [River] they're going to view it somewhat differently yet. Friant views it fundamentally differently because they've

⁶⁶ Title XVI of the 1992 Omnibus Bill is entitled "Reclamation Wastewater and Groundwater Studies; section 1607, "San Jose Area Water Reclamation and Reuse Program," calls on Reclamation, in coordination with state and local water users to plan, design, and construct "demonstration and permanent facilities to reclaim and reuse water in the San Jose metropolitan water service area." See United States Department of the Interior, Bureau of Reclamation, *Federal Reclamation and Related Laws Annotated*, Volume V of Five Volumes, 1983-1998, Donald L. Walker, editor (Denver: United States Government Printing Office, 2001), 3880.

been somewhat separated, isolated from the rest of the C-V-P. People who pump out of the Delta, like Contra Costa Water District, the first C-V-P contractor, they view things—their interests are different. And then when you get down in the Central Valley, they're not even homogenous. Exchange contractors are different than the San Luis Unit that are different than the D-M-C contractors, which might be a little bit different than Santa Clara. (Storey: D-M-C?) Delta-Mendota Canal contractors. We actually have contractors that take their water right off the Delta-Mendota Canal, and they were there, they're west-side farmers, but they were there before the San Luis Unit. They're further north. And so all of those different interests and then you add to that our obligation to deliver contractual water to the refugees. And they have firm contracts for water. And so they are now a C-V-P contractor.

And you look at all these different interests, and they're different. Sometimes they're competing. Sometimes they sue each other. Sometimes they sue *us*. But through all that we need to maintain a relationship with all of them because we have contracts with all of them. And then we have environmental laws that are laid on top of that. And our permit conditions and (Storey: From the state.) permit conditions from the state and conditions under our biological opinions with the federal agencies. And then we have new laws that are passed like C-V-P-I-A, Central Valley Project Improvement Act, that puts *new* responsibilities on us. And then you have the San Joaquin River Restoration Program, and you put all those things together, and it makes it operationally complex, because its starting to reflect the interests of all of society. And it started out as a really simple project. It was supposed to deliver water and power service and provide flood protection. (Storey: Yeah.) And its just become much more *difficult* over time. And, if you look at it, its maybe the amalgamation of all the issues that the Reclamation program will face in the future. There are just manifesting themselves there, today, maybe it's because it's such a populist state. Maybe its because its such a wealthy state. Maybe its because there's so much pressure on the species of concern. People care about these chinook salmon, and they care about these steelhead, and they care about the Delta. And the Delta's a place where people from the city go out and drive on the levees on a nice summer day and find a little town to stop in. Or people boat on the Delta. Yeah, I mean, its . . . people care about these resources (Storey: and fish for black bass) yeah (Storey: or striped bass) striped bass are now large and smallmouth. So its becoming a really complex area, and makes it a really nice case study for the kind of emerging issues you have. And it will be a test case on whether or not we can get through a social decision making process to something that is other than litigation-based—which is what we have now. (Storey: Um-hmm.) Its either regulatory or litigation based decisions now. Neither one of them are particularly effective. I take that back. They are decision making processes that are narrowly focused. Endangered species issues don't deal with ecology as much as they do the needs of the individual species. And when there's no good mechanism for looking at a landscape scale, a ecological perspective because so many things that influence the fish

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The point I was making is so many of the issues affecting the fish are outside of the agency that's being regulated. The Bureau of Reclamation has a great influence in the Central Valley just by our presence and the facilities we've built and how we operate the project. But we're only a small slice of all of the things that contribute to the ecology of the Central Valley. You

have all the other tributary interests that are private and non-federal in nature. You have the State Water Project. You have all the municipalities that discharge. You have the deep water ports and the deep water channels—Stockton and Sacramento are both deep water ports. You have invasive species that come in on bilge water. You have the levee system in the Delta. You put all those together, you have urban discharge through their treatment facilities, you kind of put all those things together, and undeniably the C-V-P affects the ecology in the Sacramento and San Joaquin river systems, but it isn't the *only* thing affecting—(Storey: Yeah.) it'd be a lot easier if this was the Riverton Unit in Riverton, Wyoming, because *there* you're the predominant activity affecting the water system in the state. Or on the upper Snake, or even the Colorado River, but when you get over into the Central Valley *or* in the Columbia River basin] the Bureau of Reclamation's program is only a significant contributing *interest*. It isn't even the most prominent contributing interest.

Storey: Well, speaking of endangered species and going across the Sierra, the Newlands Project. TROA's [Truckee River Operating Agreement] been, well, some of the folks have agreed on TROA anyway, and how were things going over there when you left.

Truckee River Operating Agreement

Glaser: Better. Not to say "just right," but I think the Newlands Project, including all the interests, whether it's the Pyramid Lake [Paiute] Tribe, the Fallon [Paiute Shoshone] Tribe, Churchill County, Reno/Sparks, Fernley, or Truckee-Carson Irrigation District, if you kind of look at those collectively, I think there's a greater chance today that they can find a way to successfully utilize their joint resource that they have—the Truckee and Carson rivers to the benefit of all of them in a more civil and collegial faction. I think they're right on the edge of being able to do that. I see signs of it all the time. And I think if we just *stay* the social course there, the direction that we're going that within my lifetime we're going to see relative peace on the Truckee and Carson rivers, and relatively clear public policy as it relates to the utilization of water in the Truckee and Carson river basins. (Storey: Hmm.) I'm very optimistic. And this doesn't mean that any one interest has to give up their interest to the others. That there is a path where everyone will see a sustaining opportunity for where their interest is. (Storey: Good.) Its been a long time in coming.

Storey: It surely has. Since the '70s at least.

Glaser: Going clear back to the '30s and '40s. Its been a long time coming. And its going to be one of those where Interior, in particular, because they have responsibility for the refuges out there—you have this incredible wetlands complex out there—and very important wetland complex. And then you have Interior's responsibility for Native American trust, and that even conflicts a little bit between the Pyramid Lake Paiute Tribe and the Fallon [Paiute Shoshone] Tribe. Then you have the Reclamation program and when you look across all of those—and we now have responsibility for Desert Terminal Lakes,⁶⁷ and so when you look across those Interior, with the help of all of our partners out there, and, actually, with Senator Reid's really

⁶⁷ "The Desert Terminal Lakes Program began with Public Law 107-171, enacted 5/23/02. The legislation provides \$200 million to the U.S. Bureau of Reclamation 'to provide water to at-risk natural terminal lakes.' Another \$175 million was provided in Public Law 110-246, enacted 6/18/2008." See Bureau of Reclamation, Mid-Pacific Region, "The Desert terminal Lakes Program," www.usbr.gov/mp/lbao/desert_terminal, (Accessed July 2014).

strong leadership, I have to give all credit to Senator [Harry] Reid relative to the Truckee River Operating Agreement, the Pyramid Lake Paiute Tribe Settlement, and the returning of health to Pyramid Lake. Now we have a ways to go, but we're just clearly on the right path. And this hasn't come at the demise of the Newlands Project. You will still have agriculture as part of the landscape in those rural counties.

Storey: Yeah. What about the canal break at Fernley? How did that affect Reclamation?

Fernley Canal Breaks

Glaser: Well, when you have something happen like that, the whole time I was regional director on my window sill behind my desk I'd keep a pile of stuff, and on top, these were a collection of things that were important to me, and on top of the pile of stuff was the front page picture out of the local paper the morning, that Sunday morning of the breach, showing all these homes under water where you're looking across this expanse of flat water and these houses sticking up through the middle of it. And something like that is a wake-up call on several levels. Reclamation had transferred, like most irrigation projects, the Truckee Canal was a transferred works, and it was transferred to Truckee-Carson Irrigation District to operate and maintain. And so Reclamation has to find the balance between turning over that responsibility and having the expectation its operated and maintained in a responsible manner. And maintaining their oversight because this remains a federal asset, and there's a federal investment in it. And it's a hard balance to find, and across the West we ebb and flow on how enthusiastically we carry out our oversight responsibility—and I'm talking about over a hundred years now because that facility has been out there a hundred years when it failed. So over a hundred year period of time you went back and looked through the records. And there were times where we were more forceful with T-C-I-D relative to level of maintenance and times we were *less* forceful with them. And the facility was old and so you have a wake-up call that says two things: one, we have to be aware that communities are urbanizing around our canals, I mean, this was a rural canal when it was built. It was just a canal out across the desert. And now communities have developed around it, and they particularly like to develop around these water features. They see canals as water features once they start to urbanize around them. And so we've had some of that in the West where communities have developed around our facilities that were not designed in a time when we thought about protecting communities from breaches. The Truckee Canal *breached* over time. And it would be repaired, and there were wasteways out there—the water would just waste to a surface wasteway and find its way down to the refuges and wouldn't be a big deal—you'd go out and fix it. Now you have a community that develops below an embankment like that and so we went out and we did our urban canal survey to get a sense of where these areas of vulnerability were. We looked at the level of oversight relative to the districts, and so we revisited some of our policies as an agency, that's on one hand. The second part of that is as it relates to the Truckee Canal itself, its still being operated under a court order so it has an operating restriction on it. Doesn't operate above 350 cubic feet per second. I think it was originally designed for a thousand or near a thousand and been operated historically at seven hundred. And so we're operating at *half* of historic operations.

Storey: Because of the break.

Glaser: Because of the breach, and the court, because the community was concerned when we repaired it, we'd just go back to our historic operations and that it wouldn't be secure—that the court, there's an operating restriction required by the court on the Truckee Canal. And we've operated to that level ever since. We have not made an improvement to the canal yet because we wanted to go through a planning study to determine what the future water supply for the Truckee-Carson service area was, to determine what the most appropriate investment would be in the Truckee Canal. Because there's the general belief that we did not need to build it to its original design capacity and maybe we could build it to five hundred cubic feet per second or four hundred and fifty. But we had to go through an analysis of future water supply needs and water available on the Carson River to determine what the capacity in the Truckee Canal needs to be. We're nearing the end of that planning study right now, and off of that we'll decide what the long term fix on the Truckee Canal will be. In the *meantime*, Truckee-Carson Irrigation District has changed both their operation and maintenance practices on the Truckee Canal. In particular they've instituted rodent control because Reclamation hypothesized that the canal failed because of rodent burrows. So we require them to keep the vegetation off of the inside and the outside of the canal. They police for rodents in the canal—muskrats in particular which are the most prevalent burrowing animals. And if they find burrows when its dewatered they have to fill the burrows. And so they've changed their practices in general. They have to monitor the external embankments for seep in this interim while we're operating at a lower level while we're studying what the long term fix is. So that's where we're at on that.

Storey: Yeah. I think I was hearing *big* figures for permanent fixes on the canal.

Glaser: I don't know. After working on the Bay-Delta Conservation Plan, nothings a big figure to me any more, but we were looking at, oh, I don't know, sixty million, ninety million [dollars] somewhere in that kind of a range. And it wasn't clear what the permanent fix would look like—whether you rebuilt the embankment with an engineered embankment or whether you excavated down the middle of the embankment and put a concrete cutoff wall in there. Because we don't know exactly what the long term needs are; we haven't gone into what the designs of the facility should be. I think were about at a point (Storey: Yeah. It's time.) Yeah. I have to get on my California water call.

Storey: Okay, let me ask if you're willing for the information on these tapes and (Glaser: Sure.) resulting transcripts to be used by researchers.

Glaser: Okay, so what am I . . .

Storey: You're saying basically what you just said.

END OF SIDE 2, TAPE 2
END OF INTERVIEW